

Study On Service Quality Of Patient Care In A Multispeciality Dental Clinic

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Abstract

Background: Dental clinic is a part of healthcare service. In the current scenario, there are over 13,000 registered dentists in Kerala, most of them set up independent clinics in different parts of the state. Therefore, there is high competition in the field of dental health care. Patient expectations and demand for quality services have increased, hence provision of quality services is important for patient retention referrals. Dental clinics should manage/ maintain, improve upon service quality to enhance patient satisfaction and for better patient care. An ideal clinic must quality services to its patients to improve their satisfaction. The rising literacy rate, higher levels of income, increasing awareness through media, has brought patients closer to demand quality dental health care. Thus, this study on service quality in the dental clinic provides feedback for clinicians for their patient oriented and patient-centric efforts in attracting and satisfying the patients.

Objectives: The main objectives are to identify the determinants of service quality, to assess the service quality experienced by the patient in the clinic and to identify 'gap' in expected and experienced service quality by the patients.

Methods: following are methods used in this study. Firstly ,conceptual phase, which is to assess the service quality experienced by the patient's questionnaire in the clinic and to assess the expectations of patients about the service quality. Secondly empirical phase, in which data collection using servqual questionnaire. Thirdly analytical phase, in which analysis of data collected and result interpretation and recommendations are also considered

Results: Service quality gap was least in the case of safety and communication aspects. Gap was minimum for behaviour of the staff instilling confidence in patients and for responsibility of the staff in providing right information to patients, also for communicating with the patients in a language they could follow. Quality gap was highest for physical facilities and convenience of operating hours

Interpretation and conclusion: Service quality in dental health care is an important factor that influences a patient's choice of a dental clinic. Patient expectations and demand for quality services in dental health care is increasing day by day, hence provision of care in accordance with their expectations is important for clinicians for providing better patient care. The study here is aimed to assess the experiences of patient regarding service quality provided in the clinic and to identify the differences with their expectations, so that suggestions can be made to improve upon patient satisfaction with the clinic. The study adds a perspective towards understanding how concept of service quality can be applied in a dental clinical. Study identifies areas of dissatisfaction which can be remedied and ensures improvement in the areas of satisfaction with ongoing notice and importance.

Key Words: Service Quality, Clinic, Patient Care, Dental

INTRODUCTION

Service quality is defined as the outcome of an evaluation process where the patient compares his expectations with the services he has received in the institution. Quality is regarded as one of the key differentiators in service excellence and the foundation of competitive advantage. "Quality in medical care is the degree to which health

services for individuals of populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."(Institute of medicine (IOM), 2001). Quality is a strategic differentiator tool for sustaining competitive advantage. "Dimension of quality includes patient's perspective issues, safety of the healthcare environment, accessibility to health care received, appropriateness, continuity, effectiveness, efficacy, efficiency and timeliness of care".Services are defined as social act which take place in direct contact between the patient and hospital which are intangible, heterogeneous & inseparable of production & consumption. Because of these factors, service quality is more ethereal in its conception than is product quality (in industry). The final determining factor in service value is quality.In the current scenario, there are over 13,000 registered dentists in Kerala most of them set up independent clinics and therefore increases competition in dental health care sector.Patient expectations and demand for quality services have increased, hence provision of quality services is important for patient retention referrals.For improved patient care and to increase patient satisfaction, dental clinics should manage, maintain, and improve service quality.A strict quality policy, to guide services delivery in a dental clinic is not stressed upon. Dental OPD's of large hospitals may follow the quality policy of the hospital. Very few multispecialty clinics, especially in the corporate sector are now quality certified.According to the facilities and services offered in the clinic, the Indian Dental Association (IDA) proposed a Quality Certification for dental clinics in India. A Clinical Establishment Bill was passed by Parliament in 2010 and is currently being implemented in the state of Kerala to help clinics provide their patients with high-quality care.In technical usage, quality has 2 meanings a) the characteristics of a services that has the ability to satisfy the implied needs of patients b) a service free of deficiencies. Thus, this study on service quality in the dental clinic provides feedback for clinicians for their patient oriented and patient-centric efforts in attracting and satisfying the patients.

AIMS AND OBJECTIVES

To access service quality in Superspeciality dental clinics to increase patient satisfaction.To identify the determinants of service quality.To access the service quality experienced by the patient in the clinic .To identify gaps in expected and experienced service quality by the patients.

MATERIALS AND METHODS

Study Design is analytical cross-sectional study. The research design here is used to assess the experiences of patients regarding the quality of services in the dental clinic and a comparison of their expectations with the current status of experiences.Study Setting is conducted in PMS dental college and research centre , which is a multispecialty dental clinic, located in Trivandrum city.All the facilities satisfying the research criteria in the study period was included in the study. Inclusion:Patients who have visited a minimum of two times in the clinic.Patients who had undergone any sort of treatment in the clinic.

EXCLUSION

Patients below 12 yrs. of age were not included in the study. Study Population: The population for study are patients visiting the dental clinic for consultation and treatment.

CLINICALASSESSMENT

VARIABLES

Tangibles,Responsiveness,Reliability,Safety,Communication,Courtesy of the staff,Empathy/ understanding of the patient

DATA SOURCES/MEASUREMENT

Primary sources- includes surveys, documents, questionnaires. Focus group discussions, observations, interviews etc.Secondary sources-includes articles journals, publications internet etc.In this study the primary source of data is from a modified SERVQUAL questionnaire for patients who have visited the clinic during the months of august-October 2015.

SAMPLE SIZE

The study includes all patients visiting the clinic during the months of August-September 2015. A census study was done including all the patients visiting the clinic during a 3 months period.

STATISTICAL METHODS

Data analysis was done using excel sheets and tabulating the results of both experiences and expectations. Pie charts were made from the tables and the result interpreted as percentage. To analyse the quality gap, scores were given to each scale ,3- strongly agree,2- moderately agree,1- agree,0- disagree,-1- strongly disagree.

RESULT

OUTCOME DATA & MAIN RESULTS

Data analysis on expectations of patients-In terms of safety and communication, patients have their highest expectations for service quality. Patients also expect to be treated without the risk of infection. Patients expect workers to communicate in a language they understand, preferably in simple words free of medical jargon. They want the doctor to carefully listen to their concerns and present them with all treatment options, as well as explanations of the consequences, so that the patient can make better treatment decisions. The patient expects the staff to treat them with dignity. (table 1).

Table 1: Data analysis-expected

I no.	Statement	Scale	No. of respondents	Marks	Score	Total score
.	Physical facilities in a dental clinic should be excellent	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	28 3 2 0 0	3 2 1 0 -1	84 6 2 0 0	92
.	Staff in the dental clinic should be neat in appearance	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	30 2 1 0 0	3 2 1 0 -1	0	5
.	Excellent dental clinic should insist on error free records	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	32 0 1 0 0	3 2 1 0 -1	6	7
.	Excellent dental clinic should provide prompt service	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	29 4 0 0 0	3 2 1 0 -1	7	5

	Staff in an excellent clinic should be willing to help patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	30 2 1 0 0	3 2 1 0 -1	0	5
.	Staff in an excellent clinic should provide proper information to patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	28 3 2 0 0	3 2 1 0 -1	4	2
.	Behaviour of staff in excellent clinic should instill confidence in patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	31 2 0 0 0	3 2 1 0 -1	3	7
.	Patients should feel safe in an excellent clinic	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	32 1 0 0 0	3 2 1 0 -1	6	8
.	Staff should be courteous to patients in an excellent clinic	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	31 2 0 0 0	3 2 1 0 -1	3	7
0.	Staff in an excellent clinic should respond politely to patient's queries	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	29 4 0 0 0	3 2 1 0 -1	7	5
1.	Staff in excellent clinic should communicate in the language of the patient	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	32 1 0 0 0	3 2 1 0 -1	6	8
2	Staff in excellent clinic should listen and explain to patients all	Strongly Agree Moderately Agree	32 1 0	3 2 1	9	

	options for their dental problems	Agree Disagree Strongly Disagree	0 0	0 -1		8
3.	Staff in excellent clinic should provide personal attention to patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	25 3 0 0 0	3 2 1 0 -1	5 0	8
4.	Staff in excellent clinic should have operating hours convenient to its patients .	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	26 5 2 0 0	3 2 1 0 -1	8 0	0

Data analysis on experiences of patients in this clinic-The patient was most satisfied with the clinic's safety concerns. They believed that the clinic's staff's behaviour instilled confidence in them and that they were not at risk of infection from the clinic. Most patients were also pleased with the staff, particularly because they were able to communicate with them and explain their dental problems as well as solutions to treat or prevent them. Experience scores for tangibles and empathy when compared to other dimensions is less. Most patients felt that physical facilities provided in the clinic were not very appealing. Secondly some patients felt that the working hours of the clinic was not very convenient to them. Certain patients commented that they did not receive individual attention in the clinic.(table2).

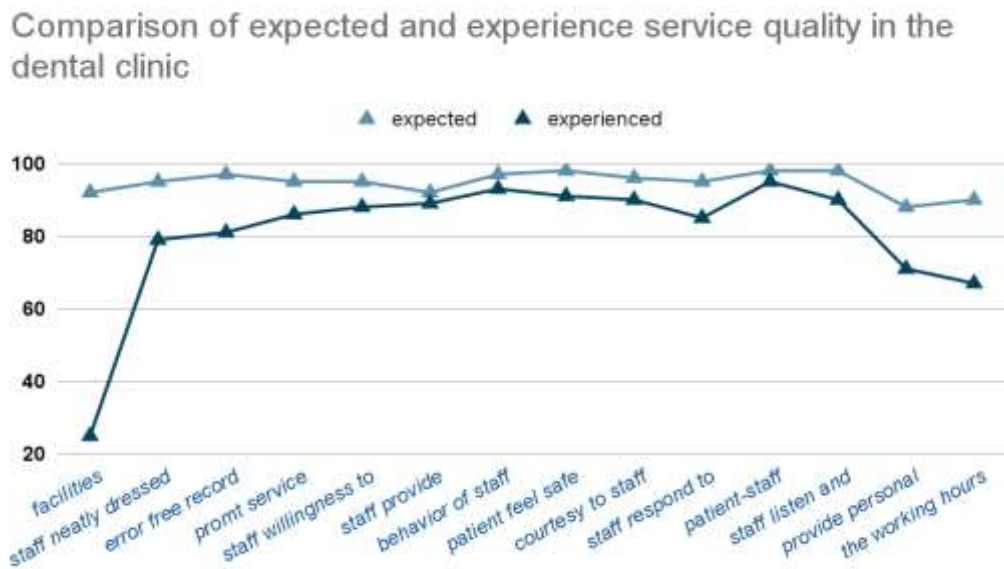
Table 2: data analysis-experienced

I no.	Statement	Scale	No.of respondants	Marks	Score	Total score
.	Physical facilities in this dental clinic is excellent	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	3 6 10 8 6	3 2 1 0 -1	206	25
.	Staff in the dental clinic is neat in appearance	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	17 12 4 0 0	3 2 1 0 -1	14	79
.	dental clinic insist on error free records	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	21 7 4 1 0	3 2 1 0 -1	34	81
.	This dental clinic provide prompt service	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	25 5 1 2 0	3 2 1 0 -1	50	86

.	Staff in this clinic are willing to help patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	25 6 1 1 0	3 2 1 0 -1	52	88
.	Staff in this clinic provide proper information to patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	24 8 1 0 0	3 2 1 0 -1	26	89
.	Behaviour of staff in this clinic instill confidence in patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	28 4 1 0 0	3 2 1 0 -1	4	93
.	Patients feel safe in an excellent clinic	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	26 6 1 0 0	3 2 1 0 -1	82	91
.	courtesy of staff in this clinic is excellent	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	26 5 2 0 0	3 2 1 0 -1	80	90
0.	Staff in this clinic respond to patient's queries politely	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	25 4 2 2 0	3 2 1 0 -1	52	85
1.	Staff in this clinic have excellent communication	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	30 2 1 0 0	3 2 1 0 -1	04	95
2	Staff in this clinic listen and explain all options for their dental problems	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	27 4 1 1 0	3 2 1 0 -1	18	90
3.	Staff in this clinic provide personal attention to patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	17 8 4 4 0	3 2 1 0 -1	16	71
4.	Staff in this clinic have operating hours convenient to its patients	Strongly Agree Moderately Agree Agree Disagree Strongly Disagree	11 16 2 4 0	3 2 1 0 -1	32	67

Comparison between expectations and experiences of patients Service quality gap was least in the case of safety and communication aspects. Gap was minimum for behaviour of the staff instilling confidence in patients and for responsibility of the staff in providing right information to patients, also for communicating with the patients in a language they could follow. Quality gap was highest for physical facilities and convenience of operating hours.(fig1).

Fig 1: Comparison of expected and experience service quality in the dental clinic



Though patients' expectations and experiences had a generalised gap. Patients almost had satisfying experiences with safety measures taken in the clinic and also with the behaviour and courtesy of staff with them. Patients opinionated that they were confident to receive treatment in the clinic because they have no doubts that we will strictly follow the sterilisation protocol. A suggestion to reduce the quality gap in physical facilities and convenience of operating hours is under consideration. Presently this clinic has working hours from 9am-7 pm. Sunday is a holiday. Patients expect clinics should be working on Sundays (as most clinics in the city), and any other weekday can be made holiday. Working hours can be scheduled as 2 shifts; 9 am-2 pm and 2pm-8 pm, staff can also be arranged to work in two shifts. This is convenient for working patients who can visit the clinic at evening hours without compromising their leave and time in the working place. Patients approaching the clinic for treatment expect the clinic to be aesthetically rich in appearance. Their expectation may be influenced by previous visits to other clinics in the city. The very first look of the clinic should be visually appealing. Clinic may have the basic physical amenities like parking space, garden, neat rooms, toilets, good chairs in the waiting area, television etc.; but they have to be placed in order and maintained frequently. The study has revealed that the expectations of patients are a little above what they have experienced in the clinic.

DESCRIPTIVE DATA

The result is mainly based on the following criterions and they are Physical facilities, neatness, Error free record, Prompt service, Willingness to help, Provide proper information, Confidence, Feeling Of Safety, Courteousness, Politeness, Effective communication, Dealing with problems, Providing personal attention, Convenient operating hours. Statement 1 and 2 measured the variable tangibles (physical facilities, neatness) Statement 3 and 4 measured reliability. Statement 5 and 6 measured responsiveness. Statement 7 and 8 measured safety. Statement 9 and 10 measured courtesy of the staff Statement 11 and 12 measured communication. Statement 13 and 14 measured empathy of the staff towards patients. All the 7 variables for study was thus included in the questionnaire. With this, total score for each question was analysed and these scores were plotted graphically for both expectations and experiences. Thus comparison between the both identified quality gaps

DISCUSSION

Service quality in healthcare sector. Service quality in the health care setting is very complex compared to other services because this sector highly involves risk(1). With a fast growth and necessity of hospital services. It becomes vital to know the patient expectation and delivery services like tangibles, reliability, responsiveness, assurance and empathy. A study was done to find the expectation and perception of patients before and after the delivery of services. The study resulted in identifying gaps to be high in case of reliability and assurance. The gap is the lowest for 'willingness of employees to attend patients' needs. The second lowest gap is for hospitals having modern equipment and facilities and 3 lowest gap for convenient operating hrs. The quality gaps were high in the employee's neat appearance, lack of interest in solving the problem, communication regarding services; problem in doing the right things for the first time, giving services as their promises; poor knowledge of employees to answer the patients questions and problems in personal attention. These dimensions had a huge gap among the patients who have their experience in the hospitals (2). The dimensions of the servqual model were identified as tangibles, reliability, responsiveness, assurance, empathy, servqual- wikipedia is a quality measurement tool developed in mid 1980's by value zeithaule, a parasuramam and leoland berry to measure quality in the service sector.(3). In a study conducted to evaluate service quality in OPD services of a hospital revealed that, Quality gap for tangibles and responsiveness' was highest. While the quality gap was lowest for individual attention to patents and readiness for personal attention (4). A study examining the quality of service provided by private hospitals in Malaysia was conducted. Results showed that patients' perceived value of services exceed expectations for the following variables measured: - Tangibles, Reliability Responsiveness. Assurance and Empathy (5). The Dental profession is taking the lead in developing mechanisms for self-evaluation. Self evaluation will ensure that dentistry as a profession can provide evidence to the community at large that its members are responsible stewards of Oral health. A culture of self-evaluation is the key to fostering the best healthcare for our patients, ensuring transparency of healthcare quality and maintaining the credibility of the dental profession. In a study on Services quality factors and outcomes in dental care (Alan Baldwin Amrik Sohal). It has been proposed that a significant variation exists between a patient's expectations of treatment quality and the perceived service quality of treatment received. This paper examined the strength of relationship between service quality practices & service quality outcome in dental care. Four factors relating to service quality in dental care was identified- responsiveness, empathetic assurance, tangibles and reliability.(6) A study done was aimed to assess the gaps in the quality of dental care in a Nigerian government owned dental clinic using SERVQUAL tool to determine the difference between expectations and perceptions of patients. Patients had the most expectation for neatness and for pain free treatment. Highest perception was for knowledge of clinical staff while support to enable staff work well was the least perceived quality. Among the & dimensions of quality significant gaps were found to exist in assurance and tangibles. The study showed that Nigerian owned dental clinic, there is need for greater attention to be paid to assurance, tangibles and reliability dimensions of service quality to improve patient perceptions (7). In a study done in dental OPDs of various public hospitals in Pakistan patients to determine factors affecting a patient's choice of dental services, Prefer in terms of professional experience of dental staff. their courtesy, consultations fee, location of clinic, availability of treatment, waiting time and clinical environment were compared with respect to their salary/income & age. It was observed that the majority of the patients, irrespective of their earnings considered professional experience availability of different treatment and clinic environment as highly preferable things when choosing a dental facility. Surprisingly the consultation fee did not get attention from many. There was no significant difference in performance when compared with different ages. This shows patients preference for dentists professional experience, availability of different dental treatments under one roof and a friendly clinic environment lies on the top of priority list, irrespective of their ages.(8). A research conducted in dental polyclinic in West Jawa Indonesia ,done to assess the quality of dental health care services based on empathy and responsiveness aspects. The results showed that perception and expectation differed significantly, except for ability of dental assistant in assisting the dentist. The important factor being the response given by administration staff related to prolonged wait time, followed by dental assistants knowledge about the patients needs during treatment determine patient satisfaction. Thus priority should be given to dentist s communication and dental assistants knowledge towards patients needs for quality betterment (9). Patient satisfaction with respect to dental services has received minimal attention in Nigeria. The study assessed dental satisfaction with the oral care delivery in a tertiary institution in Nigeria. The overall high level of satisfaction was related to the communication skills and support of staff with the patients, while low level satisfaction was related

to the infrastructure and physical comfort offered in the institution (10). Anticipation of painful dental treatment, high dental charges, long waiting time, poor access to dental service facility are the main impediments to low level of dental care utilisation and satisfaction in residents of university of Libya (11). Price and experience of doctors are two variables that may have an influence on service quality perceptions. Servqual is an effective management tool for both measuring service quality and highlighting areas where improvements could be made within a dental health care environment (12). In a study conducted by college of Dentistry in Saudi Arabia, showed that 79.5% of patients were satisfied with patients- dentist interaction, technical competency, administration efficiency and clinical environment in the college. (11) Satisfaction of patients with dental services provided is an important aspect of future utilisation of services. Fulfilment of patients expectations and demands as well as positive assurance, good responses to patients, as well as resolve confusions and doubts of the patients provides better satisfaction and result in future return of patients to receive subsequent good quality treatment Patient satisfaction is influenced by various factors- nature behaviour, communication skill and personality of clinician Communication skill is one of the most important factor determining patient satisfaction.(13)The study done in Priyadarshini Dental College and Hospital shows that a gap exist between the sort of services patient hope to receive and the services they actually receive. Most patients visiting the dental college are satisfied with the services but some were dissatisfied. The results showed that long waiting time for treatment was the 1st major dissatisfying factor .The 2nd dissatisfaction factor was poor communication skill of staff and clinicians inability to communicate in their local language was a basis for patients to understand their doctors. The study found that dental students knowledge and patients need during treatment and dentists communication demanded top priority to enhance service quality (14)

LIMITATIONS

This study is undertaken for a multispeciality dental clinic in the city. The respondents were patients visiting only this clinic for consultation and treatment of their dental problems. The service quality is determined by analysing this clinical background. There may be a tendency for biased responses from the respondent in this study. Variations can occur with various strata of population regionally. A detailed study with a more wide sample may be required to apply these data on a clinical and population based

GENERALISABILITY

This study was based on the quality services in multi speciality dental clinics .So by analysing and evaluating this article can give an overall idea on how a multi speciality dental clinic provides their services to patients and the possible pros and cons of such clinics.

CONCLUSION

This study was set out to expand understanding of how patients evaluate service quality in a dental clinic, in the context of growing demand for quality healthcare and high competition among dental clinics in the city. There is a general agreement that patients expect more than the present level of care received from dental clinics. The findings of this study has shown significant quality gaps in dimensions of tangibles and empathy of dental care services delivered to patients. Service quality policy for dental clinics can be proposed to maintain quality service delivery to satisfy patients. Replication studies using large diversified samples including more variables and dimensions can be done in similar settings.

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