SERVICE QUALITY ASSESSMENT AT A PUBLIC DENTAL HOSPITAL ISLAMABAD

[1]SHEZE HAROON QAZI
[2]RUBINA MUMTAZ
[3]SADIA SAJJAD

ABSTRACT

The objective of this study was to evaluate the quality of dental service at a public hospital in Islamabad. A crossectional survey using a modified version of SERVQUAL was carried out from June to November 2015 at the dental outpatient department of tertiary care hospital. A questionnaire was used to assess the service quality gaps in the dimensions of empathy, tangibility, assurance and responsiveness. The results showed the greatest gap score in the dimensions of tangibility and responsiveness. Thus directing focus on a well-equipped OPD and improved efforts from the hospitals managerial staff. The study highlights potentially interesting avenues and noteworthy implications for further research on improving service quality in the public sector hospitals of Pakistan.

Key Words: *service quality, dental out-patient department, SERVQUAL.*

INTRODUCTION

The quality of service in any industry has innumerable implications for its future growth and success. The interaction between the patient and provider gives the opportunity to assess and evaluate service quality plus the provider gets a chance to evaluate the patients' perceptions.[1] In a health care setting, service quality is subjective to both patient and provider perspective and ideally patient satisfaction is the key to success. Although service quality is multidimensional but in health care quality has basically two dimensions technical and functional.[2] The former encompasses the medical diagnosis and procedures while the latter essentially refers to the patient's perception of the way the services are being delivered.[3] The quality of service is a comparison between what the user expects from the provider and what is actually being offered. The present study was done to assess the service quality of a public dental hospital in Islamabad through a questionnaire administered to the patients visiting the facility. The tool used for the study was a modified version of SERVQUAL model which investigates the expectations and perceptions of patients by measuring the service quality gap.

[1] Dr Sheze Haroon Qazi, Assistant Professor, Community Dentistry, Islamabad Medical and Dental College, Barakahu, Islamabad Email: sheza.haroon@iideas.edu.pk
[2] Dr Rubina Mumtaz, Associate Professor, Community Dentistry, Islamabad Medical and Dental College, Barakahu, Islamabad
[3] Dr Sadia Sajjad, Senior Lecturer, Community Dentistry, Islamabad Medical and Dental College, Barakahu, Islamabad Email: sadia.sajjad@iideas.edu.pk

Received for Publication: December 16, 2017
Revised: January 19, 2018
Approved: January 20, 2018

The provision of service quality should fulfill the needs and anticipations of a user in an effective way.[4] The larger the gap between the consumers' expectations and what they are actually being offered, the poorer is the quality of service. Like any other industry the same principle applies in a health care setting. Health care is one of the fastest growing industries in service economy. In developing countries, there is limited allocation of resources and high demands placed on the health care institutions.[5] A review of the health sector in many countries indicates that due to managerial and technical inefficiencies, a huge sum of recurrent expenditure involves a large wastage of resources.[6] Services are defined as shared actions which occur between the customer and representative of the service company when in direct contact. In a hospital setting it is the interaction between the patient and the hospital staff including doctors, nurses, and auxiliaries.

According to the WHO oral maladies are a universal problem with diseases like dental caries (tooth decay), periodontitis, and oral and pharyngeal cancers on the rise. The prevalence of these diseases is high in both industrialized and developing countries, but predominantly amongst under privileged and poorer communities. Pakistan's health care infrastructure at the district level is based on the framework of Primary Healthcare Approach (PHCA). The level of contact between the population and healthcare system for professional dental care starts at the Rural Health Center (primary & secondary) level, with secondary level oral/dental care available at Tehsil Headquarter and District Headquarter hospitals and tertiary level

or specialist care available only at teaching hospitals.[7] Oral health care system in most developing countries has inherent limitations and thus good oral health comes as a secondary and is a luxury rather than being a necessity for the population. Pakistan is the 6th most populous country of the world. According to the multi-dimensional poverty report launched by the Ministry of planning development and reform, nearly 39 percent of Pakistanis live in multidimensional poverty, with the highest rates of poverty in FATA and Balochistan. The combined burdens of poverty, unemployment, illiteracy, malnutrition, social inequity and religious/ cultural dynamics for a commoners in Pakistan makes them virtually ignore their oral health status.[8]

The estimated population of Islamabad city alone has crossed over to 1.8 million in recent years. The increasing population of the city translates into increased pressure on public health institutions.

To improve the quality of services one needs to derive maximum benefit from the existing resources. Thus for the present study a public sector hospital in Islamabad was an appropriate starting point to direct focus to patient oriented services and effective management of the OPD.

METHODOLOGY

A cross sectional survey was carried out from June to November 2015 at the dental out patient department of a tertiary care public hospital in Islamabad. The study population consisted of all patients visiting the hospitals dental OPD.A sample size of 106 was calculated using the following formula

$N= z^2 \times p\ (1-p) \div e^2$

Where

p=prevalence=50%, α=level of significance=5%=0.05, e= error

A convenience sampling technique was used in this study. All adult patients visiting the dental out-patient department were included in the sample. Only those patients were excluded who were not treated or attended to the same day or those who were unable to give a complete response those whose expectations were recorded but perceptions could not be documented or vice versa). A modified version of SERVQUAL tool using the five dimensions of service quality was used. The questionnaire used was adapted and revised according to the Pakistani perspective. It consisted of two parts the first part casing the demographic profile of the respondents and the second part consisting of twenty questions covering each of the four dimensions of SERVQUAL. The data was collected by administering the questionnaire to the target sample through personal contact with the researcher. Prior to the collection of data the questionnaire was validated by performing a pilot test. The instrument was further refined for the final survey. A self-administered questionnaire was not used as it was expected that most of the patients coming to these hospitals have a low level of literacy leading to a low response rate thus making statistical analysis a dilemma.

RESULTS

The socio-demographic characteristics showed a male dominant (60.4%), married and unemployed (61.3%) sample mostly from the urban areas (60.4%) of the city, visiting the dental OPD. Those who were employed, only 15.1% were government employees while 23.6% were non-government employees. The highest number of respondents (29.2%) were aged between 15 to 25 years of age (Fig 1). Most of the patients had primary education while second highest number was that of illiterate patients.

Ranking for each of the 20 statements in the questionnaire was given according to the service gap score (perception- expectation). The statement with the smallest gap score had the highest rank. Similarly each dimension was ranked the same way. Empathy ranked number 1 with the smallest gap score of 0.25 (Table 1) and tangibility ranked number 4 with the gap score of 1.28 (Table 1).

We can infer from our results that t test values for the Pairs E1 & P1 (tangible dimension), E4 & P4 (tangible dimension), E5 &P5 (tangible dimension) E13 & P13 (responsiveness dimension) and E14 &P14 (responsiveness dimension) are less than 0.05 (at 95% level of significance) (Table 2). Therefore, the null hypothesis for these statements is rejected and we conclude that

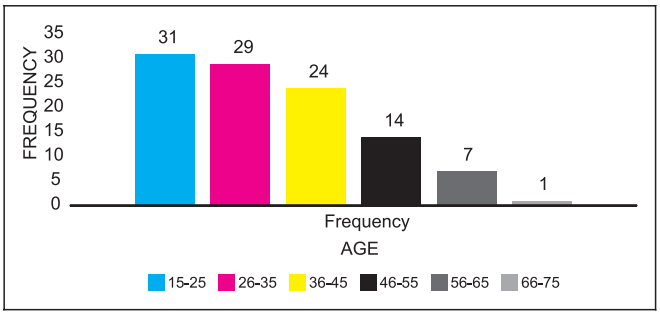

Fig 1: Age distribution

TABLE 1: RANKING OF DIMENSIONS

Dimension	P-E	Gap score	Ranking
Tangibility	9.07-7.79	1.28	4
Empathy	7.73-7.48	0.25	1
Responsive-ness	9.49-8.74	0.75	3
Assurance	8.33-7.73	0.6	2

TABLE 2: SIGNIFICANT GAP SCORES

SR	Dimensions			Mean (E)	Mean (P)	Gap (PE)	Rank	P-value
	Tangibles							
1	Dental facilities are visually appealing	E1	P1	1.44	1.77	0.33	14	0.022
4	Latest equipment usage	E4	P4	1.51	1.94	0.43	16	0.002
5	Medicines easily available	E5	P5	2.22	2.74	0.52	17	0.004
	Empathy							
13	Services are provided at time promised	E13	P13	1.81	2.38	0.57	18	0.002
14	Helpful staff	E14	P14	1.54	1.81	0.27	12	0.024

there is a significant difference between the expected and perceived values for these statements.

The remaining 15 statements had p-values greater than 0.05 at 95% level of significance. So the null hypothesis was accepted and there was no significant difference between the expected and perceived. Thus, the service quality for these statements does not need improvement in these areas.

DISCUSSION

The government health care system in Pakistan lags behind both in efficiency and service quality due to limited resources and man power. Consequently, patients visiting these facilities have a pre conceived notion about the quality of service they will receive. Thus to investigate and document a patient's perspective regarding the quality of services provided by a government institute was a useful preliminary theme for further research. To do this the tool we used was a modified version of SERVQUAL. Although it has been slated for its gap model usage , it was still chosen as it has been adopted by countless health care and non-health care organizations. The gap scores measured during the study helped us identify areas which needed improvement in the delivery of service. In UAE, a study was done to asses patient satisfaction of health care services using a modified version of SERVQUAL. It was concluded that this tool may help to contribute in enhancing the quality of healthcare services and other similar environments.[9]

In this study, the gap scores measured for all four dimensions were ranked and the lowest gap score was for empathy (0.25) and the highest for the tangible (1.28) dimension, indicating patients were satisfied with the most sensitive aspect of service delivery such as the politeness attention, and understanding dental staff. The greatest gap for tangibility indicated that the appearance of the facility and staff plus the availability of medicines were far more significant from a patients perspective. A similar study carried out in Nigeria indicated the highest expectation for the cleanliness and neatness of the dental clinic staff followed by the necessity for the employees to support their staff adequately.[10]

Sbaraini et al reported that dental out -patient care services differed from other out-patient health care services because dental procedures are tangible treatments while a visit to a physician only gives verbal advice or routine examination.[11] This may account for the patients high expectations for the tangible dimension in the dental OPD.

The dimensions of responsiveness showed only two significant results namely for the timely service provision along with the availability of helpful staff. An Indian study with similar results concluded that these deficiencies in responsiveness could possibly be due to inadequate staffing of the OPD plus lack of inputs in communicative training of the OPD staff.[12] Athough reliable and supportive OPD staff was present at the OPD but could not deliver prompt service, although willing to do so.

Correspondingly in the study this delay in the provision of services could also be attributed to the fact that the dental OPDs were ill equipped and inadequately staffed. Functioning dental units were few with an inadequate number of dentists to cater to the patient flow. This coupled with the non-availability of dental materials can account for the postponement of services provided. Therefore, an overburdened and overworked staff was unable to deliver the services promptly.

Primary healthcare approach principles should be the foundation of the present oral healthcare system. A national policy that recognizes the importance of oral health towards general health needs to be implemented in order to overcome oral health challenges of Pakistan.[13] The inequities in our health care system between rich and poor, along with issues of accessibility and appropriateness of care have never been addressed .Both health care decision makers and patients need to

be aware of these issues. A basic oral health program that is accessible, affordable and acceptable could be part of the primary health care system.[14]

This study highlights a number of potentially interesting avenues for further researchin the provision of service quality in oral health care . Further validation with a larger sample size and more insight concerning patients expectations and perceptions regarding quality of dental services in Pakistan is required.

CONCLUSION

This study helped identify significant quality gaps along specific dimensions of 'tangibility" and "responsiveness". Although the dimension of tangibility relates to the physical appearance and equipment and requires a larger change such as increased funding and change in policies. But the gap scores in dimension of responsiveness has noteworthy implications for the hospitals managerial staff.

REFERENCES

1 Peprah A, Atarah B. Assessing Patient's Satisfaction Using SERVQUAL Model: A Case of Sunyani Regional Hospital, Ghana. IJBSR.2014 ;4(2): 133-43.

2 Donabedian A. Explorations in Quality Assessment and Monitoring :The Definition of Quality and Approaches to Its Assessment. Ann Arbor, MI: Health Administration.1980;1

3 Gonroos C. A service quality model and its marketing implications. Eur J Mark.1990 ;18:36-44.

4 Berry, Leonard L, Zeithaml, Valarie A, Parasuraman A. Five Imperatives for Improving Service Quality.Sloan Management Review; Cambridge.1990;31(4): 29-38.

5 Padma P,Rajendran C, Lokachari PS.Service quality and its impact on customer satisfaction in Indian hospitals: Perspectives of patients and their attendants. An international journal.2010;17(6):807-41.

6 Tabish, S. A. Towards development of professional management in Indian hospitals. Int J Manag Med.1998.;12(2):109-19.

7 Sabih F, Bile KM, Buehler W, Hafeez A, Nishtar S, Siddiqi S. Implementing the district health system in the framework of primary health care in Pakistan: can the evolving reforms enhance the pace towards the millennium development goals? East Mediter Health J. 2010;16 (1): 32-44.

8 Tanwir F. Absence of Toothache Syndrome – Oral health and Treatment needs among urban Pakistanis. Stockholm, Sweden: Institute of Odontology, Karolinska Institute; 2008.33-34.

9 Al-Neyadi HS, Abdallah S, Malik M.Measuring patient's satisfaction of healthcare services in the UAE hospitals: Using SERVQUAL. International J Healthcare Manag.2016;1-10.

10 Adebayo ET, Adesina BA, Ahaji LE. Patient assessment of the quality of dental care services in a Nigerian hospital. J Hospital Adm.2014;3(6):20-28 https://doi.org/10.5430/jha.v3n6p20.

11 Sabraini A, McCarter S, Evans RW, Blinkhorn A. Experiences of dental care: what do patients value?. BMC health services research. http://dx.doi.org/10.1186/1472-6963-12-177.

12 Chakravarty A. Evaluation of service quality of hospital outpatient department services. Med J Armed Forces India.2011;67(3):221-24.

13 Niaz MO, Naseem M, Siddiqui SN, Khurshid Z. An outline of the oral health challenges in "Pakistani" population and a discussion of approaches to these challenges. J Pak Dent Assoc 2013;22(3):219-26.

14 Basharat S, Shaikh BT, Primary oral health care: A missing link in public health in Pakistan. East Mediterr J; .2016;22(9): 703-06.

CONTRIBUTIONS BY AUTHORS

1 Sheze Haroon Qazi: Conception, design, analysis, data collection and interpretation of data.

2 Rubina Mumtaz: Drafting of the manuscript/ proof reading.

3 Sadia Sajjad: Helped in proof reading and data analysis.