

ORIGINAL ARTICLE

## SERVQUAL Questionnaire based Health Service Quality Assessment in a Private Hospital of Western Nepal.

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## ABSTRACT

**Introduction:** Questionnaire based assessment is a simple, scientific tool to collect responses from individuals and standardised questionnaires can be used to assess health care quality of a health care institution. The aim of this study was to assess health service quality of a private hospital on the basis of questionnaire-based data collected from the patients admitted in the hospital using service quality (SERVQUAL) questionnaire method.

**Methods:** A descriptive cross sectional study was conducted in 203 adult patients in Fishtail Hospital and Research Centre, Pokhara, Nepal from January 2015 to January 2016. The response of the patients towards various aspects of service provided by the hospital was collected using SERVQUAL questionnaire. The data was graded in Likert scale and SPSS software 24 was utilized to analyse the data.

**Results:** A total of 181(89.12%) patients were satisfied with the health service quality provided by the hospital that was assessed on the basis of parameters of SERVQUAL questionnaire and 156 (76.74%) patients graded various hospital factors as being good.

**Conclusions:** Based on SERVQUAL questionnaire we found that 89.12% of patients were satisfied with the service provided by our hospital and 76.74% of patients graded various hospital factors such as doctors, nurses, reception staff and food provided in canteen as being good. We recommend such surveys should be regularly performed in health care institutions to scrutinise and enhance the level of health care service quality.

**Key words:** Questionnaire; SERVQUAL; service.

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## INTRODUCTION

Questionnaire based assessment is a simple, effective, scientific tool to collect responses from individuals.[1][2] Standardised questionnaire tools such as SERVQUAL have been validated to assess health service quality assessment of a health care institution.[3] SERVQUAL method was introduced in 1988 Parasuraman et al. and was a breakthrough service quality assessment tool that was targeted at the service sector.[3]

The SERVQUAL method of service quality assessment has been described as the most popular standardised questionnaire to measure dimensions of service quality in recent research by Caruana et al. in 2000 despite critical update published by Buttle et al. in 1996 highlighting theoretical and operational concerns and it further dominates current service quality research.[4-6] This study aimed to assess the health service quality of a private hospital based on SERVQUAL questionnaire.

## METHODS

A descriptive cross sectional study was conducted in Fishtail Hospital and Research Centre, Pokhara, Nepal from January 2015 to January 2016 in 203 adult patients. Ethical approval was obtained from the institutional Ethics committee and all the individuals involved in the study consented for participation in the study. The SERVQUAL questionnaire forms were distributed to the patients at the reception and nursing stations during admission and were collected prior to discharge. All adult patients who were able to complete the forms in Nepalese language were included and the adults/children who were unable to complete the forms were excluded.

Considering the prevalence rate of 82.8% as the satisfactory rate of patients towards service provided from past study.[6] Sample size was calculated at 95% confidence level as:  $n \geq z^2 pq / d^2$ , where n=minimum sample size needed for the study, z= standard normal deviate; 1.96, p=0.828, q=0.172 (1-p), d=0.05; allowable error. The minimum sample size calculated was 196, however we have conducted this study in 203 patients to compensate for possible subject loss during the study. Study population was patients admitted to different wards of Fishtail Hospital, and convenience sampling technique was done to collect the sample.

The data included demographic information and parameters of SERVQUAL questionnaire namely reliability, assurance, tangibles, empathy, responsiveness. Data were graded in Likert Scale of “satisfied”, “good” and “not good”. The service from various domains of the hospital namely doctors, nurses, reception and canteen were collected from the patients with parameters of “good” and “not good”. The data collected was analysed using Statistical Package for Social Sciences (SPSS 24) and data is presented as number/percentages.

## RESULTS

We conducted this study in 203 patients. Among the patients who responded, 89.12% (181) patients were satisfied with the health service quality provided by the hospital that was assessed on the basis of the parameters of the SERVQUAL method-based questionnaire (Table 1).

**Table 1. Dimensions of SERVQUAL questionnaire in Likert Scale.**

Dimensions	Likert Scale (n=203)		
	Satisfied	Good	Not good
Reliability	182/89.65%	20/9.85%	1/0.49%
Assurance	184/90.64%	18/8.86%	1/0.49%
Tangibles	175/86.20%	21/10.34%	7/3.44%
Empathy	182/89.65%	19/9.35%	2/0.98%
Responsiveness	182/89.65%	20/9.85%	1/0.49%

Data presented as number/percentage

A total of 156 (76.74%) patients graded various hospital factors as being good. The response of patients towards doctors, nurses, reception staff and food supplied in canteen are tabulated in (Table 2).

**Table 2. Patients' perspective on hospital factors.**

Hospital Factors	Likert Scale (n=203)	
	Good	Not Good
Doctors	200/98.52%	3/1.47%
Nurses	190/93.59%	13/6.40%
Reception staff	199/98.02%	4/1.97%
Canteen	190/93.59%	13/6.40%

Data presented as number/percentage

The demographic variables of the patients enrolled in the study are presented in Table 3.

**Table 3. Demographic variables**

<b>Variables</b>	<b>Frequency / Percentage (n=203)</b>
<b>Male</b>	105/51.72%
<b>Female</b>	98/48.27%
<b>Educated over 10<sup>th</sup> standard</b>	181/89.16%
<b>Hindu</b>	160/78.81%
<b>Buddhist</b>	35/17.24%
<b>Christian</b>	7/3.44%
<b>Others</b>	1/0.49%

## DISCUSSION

SERVQUAL instrument and analysis has been in use to assess patients' satisfaction towards service quality and has proved to be reliable, valid and appropriate.[1-3] Since its introduction and validation, SERVQUAL method has been utilised by different service sectors, cross cultural contexts and geographical locations including health care to assess the perception of the patients and comparing that with the expectations they have by utilising the five different dimensions namely; reliability, assurance, tangibles, empathy and responsiveness, that represent the spectrum of service quality.[3] Tangibles means the physical facility of the hospital. Reliability means the ability of the service providers to cater the promised services to the clients efficiently. Responsiveness means the willingness of the service providers to provide assistance as needed on time. Assurance means knowledge and courtesy of service providers and their ability to inspire trust and confidence of the clients. Empathy refers to the ability of the service providers to make the clients feel that their feelings towards the service have been accounted for validly by giving individual attention and care.

This instrument has been utilised in context of Nepal to assess the service quality in a hospital setting in public hospital and private hospital in the Kathmandu valley. We have used the SERVQUAL instrument tailored to the patients to assess the health service quality in a private hospital first time outside Kathmandu. The study done in private hospitals of Kathmandu valley by Ramesh et al. indicated that each dimension of service quality was positively correlated with patient satisfaction but study done in public hospital by Bishnu et al. stated that each dimension of service quality was negatively correlated with patient satisfaction.[7][8]

The health sector occupies an important position in making sure a sustainable overall socio-economic development in developing countries.[9] Hospitals in the developed world recognize the importance of delivering patient satisfaction as a strategic variable and a crucial determinant of long-term viability and success.[9][10] Hospital varies from one another in terms of their speciality, services offered and resource availability. In the 21<sup>st</sup> century, all successful organisations have adopted a customer focus as the central pillar of their strategies planning. Similar to other service industries, health care has become a highly competitive and rapidly growing industry worldwide.

A patient may never get cured but may feel very well cared for and vice versa. In the current scenario, patients collect and gain health information from various sources, though superficial, than ever before about their diseases, treatment that their doctors are prescribing, and issues related to side effects and success or failure of treatment.[11] Patient contentment is a principal decision-making tool in selecting healthcare services and service quality should meet customers' expectations. Measuring the opinion of patients can help facilitate hospital service provision and management as well as increase the marketability and durability of the service provided. With better understanding of how patients evaluate the quality of healthcare services, health care providers and administrators can improve the healthcare delivery system. Continuous monitoring of patient expectations and perceptions will improve the quality of health care and patient satisfaction. We have tried to utilize SERVQUAL tool to measure the service quality of our hospital.

Private hospital & private healthcare is health care provided by non-governmental entities. All the financial support in such an entity is created by the single or a group of people. The management of the private facility also depends upon the people involved and the organisation as it selects the team of board members to look after the day to day management. The government on the other hand, forms the rules and regulation and criteria to be followed by the private sector. Private hospital works on a fee-for-service basis and a patient centred approach and its management is focused in patient satisfaction in terms of convenience of time to the patient, time given by the doctors and nurses, less waiting time, cleanliness, better equipment and physical infra structure. Although it is imperative that all institutes catering to health services, be it a public based or a private investment based institute should strive for the best level of care to be achieved, the burden of providing satisfactory quality service lies more on the private sector and rightly so. The clients, i.e., the patients are spending their hard earned resources and have approached a private institute for various reasons; one of the most relevant reasons being that the expectation of quality of service is likely higher when the expenditure is higher. It is hence expected for a private institute to have a baseline of quality service. It is also expected, and beneficial for the institute to find out about the satisfaction or dissatisfaction of its clients and take measures to improve its health services where and when needed.

The method of utilizing the SERVQUAL model has been seen to be having beneficial usefulness in assessing the clients' expectations about the service quality that he/she is to get and also the resultant perceptions of the service quality that the client has perceived. The SERVQUAL method is also useful in finding out the areas requiring improvement. Also, when this tool is implemented in future study projects, especially in the medical service, it can further encourage future research on the existing quality and results and measures needed to improvement of the same.

In the context of our research, the responses of the clients greatly benefitted the institute in finding out about the perceived quality of care as felt by the patients of the hospital. As one of the measures for improvement of service quality, the response of the questions could be utilized during discussions of the monthly improvement meetings of the institute. This method of utilizing responses from the questionnaire has been a relatively cost-effective and easy to implement method for the institute for the continuous betterment of the service quality.

## **CONCLUSION**

Based on SERVQUAL questionnaire we found that 89.12% of patients were satisfied with the service provided by our hospital and 76.74% of patients graded various hospital factors such as doctors, nurses, reception staff and food provided in canteen as being good. We recommend such surveys should be regularly performed in health care institutions to scrutinise and enhance the level of health care service quality.

## **CONFLICT OF INTEREST**

None

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None

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