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AN ASSESSMENT OF SERVICE QUALITY IN WESTERN REGIONAL HOSPITAL POKHARA

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ABSTRACT

The objective of this study is to analyze the service quality expectations from healthcare institutions by customers in Pokhara and comparing their experiences in Western Regional Hospital (WRH). This study applies an adapted SERVQUAL model to compare patient perceptions of WRH against their expectations from an excellent hospital. SERVQUAL captured a general criteria using a scale composed of 21 items (statements) designed to load on five dimensions reflecting service quality. The service quality is the difference between customers' perceptions and expectations. The data revealed a clear difference between what patients expected and what they received from WRH. It identified a significant consumer gap (Gap 5) between the expected and perceived services offered by the hospital. The most important finding was that all five dimensions have negative SERVQUAL scores, which implies that none exceeded patients' expectations. The conclusions and discussions made are from evidence collected through a survey conducted in patients and the general public (outpatients/caretakers). Data were collected through 119 self-administered questionnaires. Staying at the exit, questions were asked to the patients and care takers while they were returning their home after the service. The statistical package SPSS 16.0 is used in analyzing data which are collected from questionnaire.

Keywords: Service Quality, Expectation, Perception, Self-administered Questionnaire.

INTRODUCTION

Understanding customer expectations in any industry is the lifeblood for understanding what you are doing is right or wrong. The post-modern hospital is a far different place as a result of the constant change in the needs and expectations of patients. Driven by economic necessity and technologic advances, the patient demands a higher level of accuracy, reliability and overall better service than in the past.

Driven by economic necessity and technologic advances, the patient demands a higher level of accuracy, reliability and overall better service than in the past. Thus society, and we are society, says: "Before we give you our money, our trust, our bodies, our children, answer these questions: how do you know how good the service you are offering is? What evidence do you have that you can show us and which convinces you that your care, administration, service, technology are exactly

what we want to receive?" Health care sector should not be considered as other consumer market since this is directly related with human body. So, quality comes as the important factor of this market.

Further, quality can be used as an effective strategy for raising return on investment, increasing market share, improving productivity, lowering costs, and achieving customer satisfaction. Service sector is the rapidly growing area of the world economy and the health services organizations play an important role in such growth. During the recent decade, the number of private centers providing health care services in Nepal has been ever increasingly growing, and the private health care services market has turned out to be a competitive environment. Patient perceptions of health care quality are critical to a health care service provider's long-term success because of the significant influence perceptions have on customer satisfaction and consequently organization financial performance.

Western Regional Hospital is located in the Pokhara Valley in Kaski district. Geographically, it is the central

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area in the map of Nepal. According to the latest census 2011, Kaski district has population density of 244 and average household size 3.92. Total population of Kaski district is 492,098 and the district has total 125,673 households. Government of Nepal has all together 5 administration regions in Nepal. Annual trend of people who comes to Western Regional Hospital for the treatment, health advices, and other services are increasing at 3 percentages (Annual performance

Table 1. Annual Performance Review of Western Regional Hospital Pokhara.

Indicator	066/67	067/68	068/69
No of inpatients	20221	21292	21830
Duration days	73638	76683	77925
No of patients served in OPD	146896	128459	144455
Total Number of Patients	167117	149751	166285

Source: Annual performance review- WR Hospital Pokhara, 2068/69.

The trend of patients flow in Western Regional Hospital can be said not increasing though it is not decreasing largely. In case of out-patients, it is not fluctuated as it is in inpatients. It has been considered as one of the pillars in health service provider's reliable list, sometimes it becomes a news heading in media due to its poor quality health service. Sometimes due to doctors or nurses ignorance and sometimes due to not giving accurate information on patients' health condition, sometimes it becomes a subject of debate. Also its recruitment activities in administration and healthcare professionals also come in debate. These all things have impact on service quality of Western Regional Hospital. Not only negative things, it became example several times to provide quality healthcare service to general people.

With the increase in urbanization and standard of living of the people, the awareness on health care services also increases. The consumer's expectation on the quality in health care services is also increasing at a faster rate. Service quality has been shown to be an important element in the consumer's choice of hospitals. Quality in health care is defined as the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (Korwar, 1997). Health care service quality is giving patients what they want (patient quality) and what they need (professional quality), and doing so using fewest resources, without error, delays and waste, and within higher level regulations. In the present study, the focusing services are all health care services together. Thus the purpose of this research is to find from empirical data, received using Parasuraman, Zeithaml and Berry's (1988)

report WRH Pokhara, 2069). Daily average 60 patients come to Western Regional Hospital for the healthcare service. From its establishment i.e. a decade after establishment of democracy in Nepal, it has been last resort for all the Nepalese in western development region.

Following table illustrate the performance of Western Regional Hospital Pokhara in terms of number of patients served in the last three years.

SERVQUAL model, the standard of service quality offered by western Regional Hospital in Pokhara.

Theoretical Framework: The consumer evaluations of service quality centre on the balance of their expectations and perceptions of a service. Expectations that are met or exceed in a service encounter, or series of service encounters, will result in adequate or ideal service quality evaluations. Alternatively, expectations that are not met will result in negative service quality evaluations.

Marketing researchers use these five dimensions to form an assessment of service quality, based on the comparison between expected and perceived service. The gap between expected and perceived service is the measure of service quality. The advantages of using this model in healthcare is that the empirically derived data from the research questions of the distributed surveys form a positivistic paradigm to improve the service quality by identifying gaps in the different dimensions of quality offered by the hospital services. This provides quantifiable reasoning to the research questions in each dimension so that precision, objectivity and rigor replace hunches, experience and intuition as a means of investigating problems (Hussey and Hussey, 1997).

DATA AND METHODOLOGY

Data: Anyone who has been to Western Regional Hospital once for their healthcare service is taken as the population for the study. The population of this study consists of all the patients and caretakers above 15 years age. And those who have just received the services at Western Regional Hospital are considered as the sample for the study.

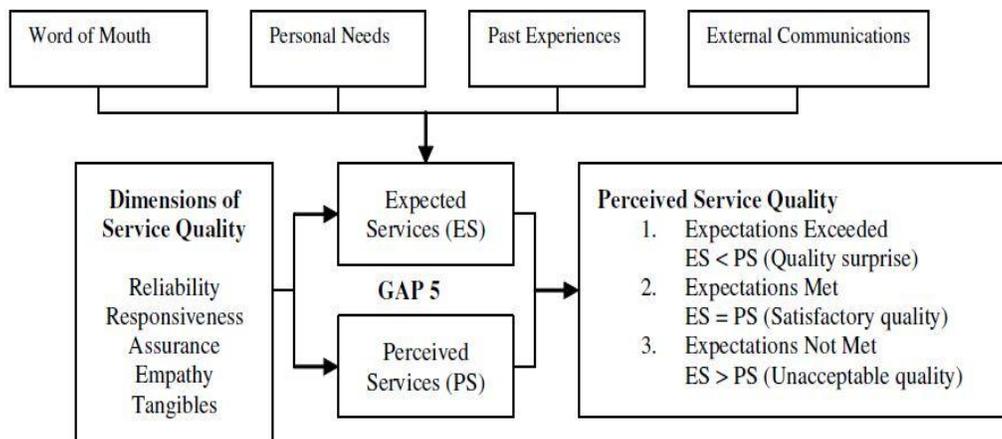


Figure 1. Gap Model of Service Quality.

So, those people who are or have been to Western Regional Hospital for healthcare services are chosen as the respondents. The respondent may be patients' themselves or their care takers or outpatients. Patients are asked to answer a total of 42 questions (21 expectations against 21 perceptions), within each of the five dimensions which are then used to determine: the relative importance of each attribute, measurement of expectations that would relate to an "excellent" service provider and measurement of performance of Western Regional Hospital. Adding to this, it allows for an assessment of the gaps between desired and actual performance. Data collection was carried out from 24th December 2012 to 3rd January of 2013. Convenience sampling technique was used to select respondents with the sample size of 119 patients and caretakers.

Methodology: The conclusions and discussions made are from evidence collected through a survey conducted using a SERVQUAL model that has been modified to specifically address service quality requirements of the Western Regional Hospital by patients and the general public(outpatients/caretakers). Data were collected through self-administered questionnaire. Staying at the exit, questions were asked to the patients and care takers while they were returning their home after the service.

After all these analysis, 21 statements in both the expectation and service perception were checked through the 5 point scale. Factor analysis is a measurement tool of service quality's five dimensions and in this study those five dimensions were kept constant, which also takes place in the original service quality model developed by Parasuman *et. al.* (1985). For data coding, E-terms were used for the expectations

and P-terms were used for the patients perceived service quality after receiving the service from Western Regional Hospital Pokhara. After receiving the services from Western Regional Hospital Pokhara, patients' were asked to fill the questionnaire or express degree of agreement with the statements by thick marking on the respective five point likert scales. Similarly scores for other dimensions like; tangibles, reliability, responsiveness, assurance and empathy have been calculated. The difference is the service quality of the hospital. Researcher used five dimensions to form an assessment of service quality, based on the comparison between expected and perceived service. The gap between expected and perceived service is the measure of service quality. Different statistical tools have been used to analyse the service quality of Western Regional Hospital Pokhara.

RESULTS AND DISCUSSION

Description of Sample: Various demographic variables have been displayed through this description of sample. Table 2 illustrates the demographic variables like gender, age of the respondents, education levels of the respondents, occupations of the respondents, and places where they came from.

Descriptive Analysis of Expectations and Perceptions: In terms of expectation, the mean ranged between 4.49 and 4.95. Similarly, mean scores for "perception of actual service" ranged between 2.07 and 4.59. The highest "perception score" was for statement 5 which is hospital should always have visitor parking available. After the inpatient get discharged from hospital or out patients receive the service; how they felt about the service quality dimensions are statistically analyzed as shown in the following table.

Table 2. Descriptive Statistics of the Demographic Variables (N=119).

Variablese		Frequency	Percent
Gender	Male	70	58.8
	Female	49	41.2
Age of the respondent	15-25	24	20.2
	25-35	44	37
	35-45	30	25.2
	45-55	12	10.1
	55-65	9	7.6
Education	Illiterate	11	9.2
	Lower secondary	30	25.2
	SLC	32	26.9
	Higher Secondary	25	21
	University level	21	17.6
Occupation	Employed	25	21
	Own Business	29	24.4
	Student	21	17.6
	Housewife	24	20.2
	Others	14	11.8
Address	Pokhara Valley	52	43.7
	Out of valley-Kaski	30	25.2
	Syangja	11	9.2
	Baglung	10	8.4
	Parbat	6	5
	Manang	5	4.2
	Gorkha	3	2.5
	Lamjung	1	0.8
	Tanahun	1	0.8
Total	119		

Table 3. 119 Questionnaire Responses Grouped into Five Dimensions.

Statements	Expectations	Perceptions	Difference
Tangible Statement			
Q1 Hospital cleanliness and hygiene should be excellent.	4.95	2.24	-2.71
Q2 Hospital personnel should appear neat.	4.65	3.76	-0.89
Q3 Hospitals should always have up-to-date equipment.	4.57	3.35	-1.22
Q4 Hospital staff should be pleasant when dealing with patients.	4.55	2.07	-2.48
Q5 Hospital should always have visitor parking available.	4.74	4.59	-0.15
Reliability Statement			
Q6 Hospital services should be prompt every time.	4.61	2.24	-2.37
Q7 Hospitals medical reports should be accurate.	4.56	3.95	-0.61
Q8 Hospitals expense reports should be accurate.	4.67	3.49	-1.18
Q9 Patients should receive adequate information about their medical condition.	4.59	2.95	-1.64
Q10 Patients should feel confident when receiving medical treatment. in a hospital.	4.61	3.08	-1.53

Responsiveness Statement				
Q11	Hospital administration staff should be efficient at dealing with patient's queries.	4.69	2.35	-2.34
Q12	Hospital employees should inform patients exactly by when services will be performed.	4.6	3.69	-0.91
Q13	Hospitals should have convenient times for patients to use their services.	4.49	2.99	-1.5
Q14	Hospitals must have experienced personnel on duty at weekends.	4.61	2.65	-1.96
Q15	Hospital reception should answer outside phone calls promptly.	4.61	2.76	-1.85
Assurance Statement				
Q16	Hospital employees should always respect patients' privacy.	4.67	2.97	-1.7
Q17	Hospitals employees should care about their patients.	4.67	2.54	-2.13
Q18	Hospitals should always provide proficient medical staff.	4.72	2.54	-2.18
Empathy Statement				
Q19	Hospital employees should provide individualized medical attention.	4.61	3.21	-1.4
Q20	Medical staff should always show understanding towards patients' feeling of discomfort.	4.76	2.81	-1.95
Q21	Patients should be treated with a warm and caring attitude in hospitals.	4.66	2.53	-2.13

Paired Sample T-test of all 21 Statements: The description, correlations and paired-sample t-test results using SPSS program was used to compare the 21 mean scores for expectation and perception statements. The t-test was to compare the means and evaluate whether to confirm H1 and reject H0 or vice versa by calculating a (significant) difference between the expectation and perception of patients who use Western Regional Hospital Pokhara.

Table 4 (a). Paired Samples Description Statistics (Exp=Expectations & Perc=Perceptions).

	Mean	N	Std. Deviation	Std. Error Mean
Exp	4.6482	119	0.19174	0.01758
Perc	3.0458	119	0.30087	0.02758

Table 4 (b). Paired Samples Correlations (Exp=Expectations & Perc=Perceptions).

	N	Correlation	Sig.
Exp & Perc	119	0.149	0.04

Table 4 (c). Paired Samples T-Test (Exp=Expectations & Perc=Perceptions).

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Exp - Perc	1.602	0.3318	0.03041	1.54225	1.66271	52.69	118	0.000

The results presented in Table 4 (c) show that the difference between the two sets of mean scores was unlikely to occur by chance. The results do not report the magnitude of the intervention's effect, the degree to which the two variables are associated with one another. In other words a small difference between groups can

become statistically significant but this does not mean that the difference has any practical or theoretical significance. In order to assess the importance of the findings the "effect size" (also known as "strength of association") can be calculated. This is a set of statistics that indicates the relative magnitude of the differences

between means, or amount of total variance in the dependent variable that is predictable from knowledge of the levels of the independent variables (Tabachnick & Fidell, 2007:54). There are a number of different effect size statistics. The one used for this analysis to compare the data was the Eta squared. The calculated Eta squared was 0.956.

The guidelines (proposed by Cohen, 1988:284-287) for interpreting this effect size are as follows: 0.01 = small effect, 0.06 = moderate effect, 0.14 = large effect. Given our Eta squared value of 0.95 i.e. greater than 0.14 for the differences between expectation and perception mean scores, we can conclude that this is a large effect. Therefore from the data we can say, the paired sample t-test concluded that there is a statistically significant difference in the total perceptions mean score ($M = 3.0458, SD = .301$) compared to the total expectations mean score ($M = 4.6482, SD = .191$), $t(118) = 52.69, p < 0.05$ (two-tailed). Table-3 is the assessment of service quality using SERVQUAL that involved computing the difference between the rating which patients assign to expectation statements and to perception statements. For each pair of statements, the SERVQUAL score was computed as follows:

$$\text{Service quality (Q)} = \text{Perception (P)} - \text{Expectation (E)}$$

Western Regional Hospital's quality of service was assessed along each of the five dimensions by averaging

the SERVQUAL scores on the statements making up the dimensions.

Paired-Sample T-test of the 5 Dimensions: Following figure illustrates the gap between expectations and patients perceived service quality after receiving the service in Western Regional Hospital. The mean difference in tangible scores was 1.48 with a 95% confidence interval ranging from 1.41 to 1.56. The Eta squared statistic for tangible scores (0.92) indicated a large effect size. There was a statistically significant difference in "reliability expectations scores" ($M=4.61, SD=0.026$) to "reliability perception scores" ($M=3.14, SD=0.38$), $t(118) = 36.84, p < 0.0001$ (two-tailed). There was a statistically significant difference in "reliability expectations scores" ($M=4.61, SD=0.026$) to "reliability perception scores" ($M=3.14, SD=0.38$), $t(118) = 36.84, p < 0.0001$ (two-tailed). There was a statistically significant difference in "empathy expectation scores" ($M=4.67, SD=0.30$) to "empathy perception scores" ($M=2.84, SD=0.56$), $t(118) = 32.57, p < 0.0001$ (two-tailed). The mean difference in empathy scores was 1.83 with 95% confidence interval ranging from 1.72 to 1.94. The eta squared statistic for empathy scores (0.89) indicated a large effect size. Also, data revealed Wilks' Lambda = 0.69, $F(4, 152) = 15.459, p < 0.001$, with a multivariate partial eta squared = 0.35. This shows a significant effect in the differences between the five dimensions.

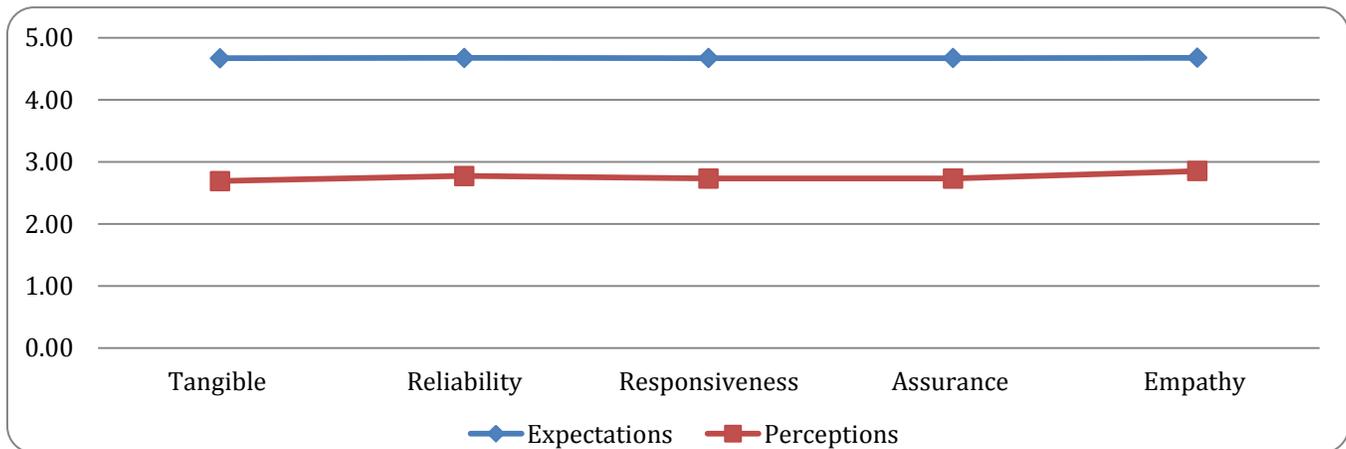


Figure 2. SERVQUAL Dimension Gaps between Expectations and Perceptions.

The one-way repeated measures ANOVA was calculated using the SPSS program to compare respondents' responses to the five different dimensions. This result would identify if the patients evaluated the quality of service at WR hospital differently according to the five different dimensions.

Results of Inferential Analysis: Different kinds of

analysis were performed to determine any statistically significant differences between the mean scores of expectation and perception. It was clear from the results that a significant difference exists between the expectation mean scores and the perception mean scores with a large effect. The data also revealed significant differences in the mean scores between the

five dimensions of quality of service as perceived by patients that used the hospital. All replies showed a weakness in tangible things, with major cleanliness and hygiene; responsiveness. Empathy has been identified as the dimension that WR hospital showed greater strength in compared to the other dimensions. But care takers, rather than inpatients and out patients highlighted that as an inpatient had been offered the services are far worse in all five dimensions especially in tangible, responsiveness and empathy. As an inpatient these two dimensions are probably the main areas of service you expect to be efficient.

DISCUSSION

The data revealed a clear difference between what patients expected and what they received. It identified a significant consumer gap (Gap 5) between the expected and perceived services offered by the hospital. The study identified areas in the daily operations of the hospital where patients expected to receive high quality of service and other areas where they were not as critical about the quality of service they received. The study did highlight service quality weaknesses as perceived by patients' poor perception scores for services they received when using the hospital. The most important finding in WRH was that all five dimensions have negative SERVQUAL scores, which implies that none exceeded patients' expectations. The analysis has showed significant differences between the five different dimensions of service quality as perceived by patients who received services from Western Regional Hospital, Pokhara. It identified areas that are expected to be high by hospital standards but which received poor service quality scores, such as responsiveness and reliability.

A good listening system could incorporate approaches to address all possible reasons for not understanding what customers expect. Reading the patient comments and connecting it to what the research data has revealed shows that administration and medical staff do not know what customers expect. Knowing what customers expect is the most important step in delivering quality service. There is lack of upward communication in WRH, these service quality gaps must have been identified by patient-contact personnel while dealing with the patients but management have not encouraged suggestions, by personnel, to identify and upgrade the areas of concern. Administration need to arrange more formal or informal meetings to give patient-contact personnel an opportunity to communicate openly.

Management must first understand exactly what the customer wants. If this understanding is not present, it will be impossible for management to know whether their expectations are aligned with customer specifications. Teamwork is another way to improve the performance of WRH.

RECOMMENDATION

In this dissertation the findings were analysed and discussed relating to the empirical research data of patients' assessment of the quality of service at Western Regional Hospital. Hospital administration need to look into the services offered to an inpatient: rooms, ward nurses response times to calls, theatre etc. and upgrade these services to close these key gap differences. Patient-contact employees and managers do not work well as a team in trying to resolve problems or contribute to the team effort in serving customers. The support staff such as stores, cleaning janitors and accounts needs to support each other to provide good service to the customer-contact personnel. And future researchers can study on other gaps than gap-5 that exists in Western Regional Hospital.

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