Impact of SERVQUAL on Client Satisfaction under the Mediating Effect of Disconfirmation: A Study of Social Security Hospitals of Punjab

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ABSTRACT

This study is intended to investigate the level of quality of health services being provided in social security hospitals and its relation with customer satisfaction with a mediating role of disconfirmation related to perceived quality by customers in security hospitals of Pakistan. In order to explore this problem, face to face interviews and a developed questionnaire is used comprising of six dimensions of quality which include empathy, responsiveness, timeliness, assurance, administrative systems and social responsibility. The role of Disconfirmation is measured as a mediating variable and is found partially significant in this particular case. This research was conducted on patients admitted in the hospitals, most of the patients were found satisfied with overall services of hospital. The patients were found satisfied because of right diagnosis of doctors, free of cost treatment and their lower expectations for service quality. However the need is hospitals should focus on improving their service quality as it has to deal with and affect the significant population of workers and their dependents.

KEY WORDS: Service Quality, Customer Satisfaction, Disconfirmation, Social Security Hospitals

1. INTRODUCTION

Quality of services is gaining much importance in health sector within developing and developed countries. In developing countries, patients’ satisfaction is an ignored factor. So, it’s an obvious thing that “formal evaluation mechanisms including consumer satisfaction” are lacking in many of the developing countries health sector. This shows that in developing or low income countries, “consumer perceptions on health care” is basically disregarded and overlooked by the “health care providers” [1].

This phenomenon is visible in many developing countries including Pakistan. Patient satisfaction is not given importance in order to improve and progress the health care quality. There are many factors which are the reason behind the poor quality of health care facilities in public sector specifically, are “absence of recognized standards, lack of health care evaluation, and unkind and ruthless attitude of management towards patients’ needs.” This deterioration in quality of health care facilities and services is mainly due to the “low public sector spending on health sector” in Pakistan.

Social protection schemes existed in health section in Pakistan for poor, needy, and lower income groups. However, the effectiveness of these schemes in terms of “service delivery, quality and scope” entails ample valuation and assessment. This study will examine the quality of “health services provided” under these social protection schemes. The current study is planned with the objective to “assess health services quality from consumer perspective in Punjab Employees Social Security Institution’s hospitals in Punjab”.

There are number of studies which have searched and investigated “patient’s perceived satisfaction for outpatient services” from the SERVQUAL dimensions particularly assurance, timeliness, responsiveness, professionalism and so on. However, in Pakistani context, this type of SERVQUAL dimensions particularly for PESSI hospitals, are rare.

As the SERVQUAL approach has faced criticism that it does not measure non human element of service quality. In this study by adding dimensions of administrative system of service delivery and social responsibility it is envisaged that non human element of service quality will also be effectively measured

1.1 Problem Statement:

The problem lies in determining the effect of quality health services on the satisfaction of the beneficiaries in social security hospitals in Punjab. This study will help to get better understanding that how customer satisfaction can be achieved through improving human and non human dimensions of service quality.

1.3 Study Justification:

Since, extensive literature search shows that there is negligible work has been done in health sector of Pakistan in which service quality dimensions or a hybrid SERVQUAL and SERVPERF model is used. Therefore, quality
evaluation of Provincial Employees Social Security Institution (PESSI) hospitals and its impact on patient satisfaction provides this research opportunity. Assessment of the quality dimension of health and its relation with customer satisfaction will helps in guiding and formulating the necessary recommendations and suggestions about humanizing the structure and organism of health care deliverance.

1.4 Significance of the Study:
As there is negligible or nil work is done on “patient perceptions to evaluate the quality of health care” in Pakistan. Literature review provides no evidence about any comprehensive and thorough study that has been conducted in Pakistan to understand the “relationship between service quality and satisfaction of customer” under the mediating role of disconfirmation in health industry.

2. LITERATURE REVIEW

“The importance of ‘patient’ perceptions also referred as consumer, in health care systems from the fact that consumer assessment not only identifies drawbacks in quality but their expectations also provide a way forward to improve the existent status of a “health care services” [2]. Patients’ satisfaction is considered to be an effective and significant indicator to enhance and improves the hospitals’ reputation and helps development in medicines and pharmacy. As, ‘patient’ have much impact on the hospital and its reputation, this word “patient” should be replaced with the most powerful term “customer or client” for enhancing the services and to maintain a courteous relationship with them. “With complex nature of human perceptions, patient satisfaction is rather a multifaceted phenomenon, where consumer perceptions represent a diverse blend and combination of perceived needs, hope, opportunity, prospect, familiarity, experience and know-how of health concern” [3].

SERVQUAL was developed as an instrument intended for quality measurement in the service sector generally and has been largely used in studies conducted in healthcare service quality. SERVQUAL has received numerous criticisms since it was developed in the second half of the 1980s; however, it still abides as a useful tool used in studies destined to incorporate and test the service quality in their research effort. The generally used form of SERVQUAL consists of 5 dimensions. These five determinants are reliability, tangibles, assurance, responsiveness, and empathy. [4] postulated accessibility, responsiveness and professionalism and availability of doctors and staff as criteria for good service quality. [5] developed an application for measuring service quality in retail banking, and dimensions of accessibility, accuracy and tangibility were found as significant measures of service quality.

However in many studies some other dimensions to measure service quality are used afterwards. A modified SERVQUAL approach including usability as the sixth service quality dimension was used in Turkey to measure customer satisfaction. However, studies showed the usability insignificant element to measure customer satisfaction [6].

Dimension of timeliness in SERVQUAL to measure customer satisfaction in hospitals of Pakistan which was found insignificant factor. Patient availing facilities from the public hospitals perceive that public hospitals are not making significant effort in order to deliver better quality of services to their patients [7].

Administration of hospital or administration systemization of service delivery comprises of practices and procedures of patients’ admittance and ejection. Literature described that patients are not satisfied and at ease in many hospitals across different countries, with the extended and extensive waiting hours for treatments and check ups. The relief of receiving “schedule and appointments, ambulance services, ease of access and discharge, etc.,” all are indispensable to guarantee patients’ an uncomplicated and reliable cure. So, well-defined and well implemented organizational and managerial measures are compulsory, mandated and necessary to make the patients’ remain in the hospital and get the continued treatment. In this era of competition in service industry a service firm cannot focus only on profit, they need to show social responsibility to improve customer’s perceptions [8].

[9] used SERVQUAL factors in their study to measure service quality in hospitals of Bangalore (India) and gained the “perceptions of both the patients and the hospital management.” This study concluded with gap identification that “there existed an overall gap between patient’s perceptions and expectations.” [10] projected that satisfaction is “a function of the disconfirmation of performance from expectation.” Satisfaction is more reliant on “the ability of the supplier to meet the customer’s standards and expectations and no matter how good the services are, customers will continually expect better services” [11, 12, 13]. “Expectancy-Disconfirmation Theory” set forward by [10] suggested that “customers purchase goods and services with pre-purchase expectations about foresee performance.” Outcomes are compared against expectations when the product or service has been purchased and used. Confirmation occurs, “when the outcome matches expectations.” Disconfirmation occurs, “when there are differences between expectations and outcomes.” Cause of satisfaction include “confirmation or positive disconfirmation of expectations” and cause of dissatisfaction includes “negative disconfirmation of consumer expectations.”
Health service being provided in social security hospitals is better than service provided in public hospitals and is satisfying to its customers due to financial benefits and other service benefits and assurance from doctors. However these hospitals need to improve their services because many people and their dependents are associated and affected by the services they provide [1].

The proposed model in Fig.1, assumed that “a person’s perception of service quality is the composition of that person’s perception of all these dimensions”. Definitions for the dimensions of the service quality are adopted from [14]. These are listed as:

- **Reliability**: “Delivering the promised performance dependably and accurately.”
- **Responsiveness**: “Willingness of the organization to provide prompt service and help customers.”
- **Assurance**: “Ability of an organization’s employees to inspire trust and confidence in the organization through their knowledge and courtesy”
- **Empathy**: “Personalized attention given to a customer.”

Disconfirmation is the subjective judgment of the customer from comparing expected service quality with the actual service quality received. It plays a major role in satisfaction decisions [10].

If the perceived quality or performance received is same as the expectations of customer it confirms its pre-purchase expectations and in other case when expected and received quality differs in positive or negative way it creates positive or negative disconfirmation which directly effects the customer satisfaction in either way.

3. RESEARCH HYPOTHESES

- **H1**: Service Quality has a significant positive impact on Disconfirmation
- **H2**: Service Quality has a significant positive impact on Customer Satisfaction
- **H3**: Disconfirmation has a significant positive impact on Customer Satisfaction
- **H4**: Disconfirmation has a partial mediating relationship between Service Quality and Customer Satisfaction

4. METHODOLOGY

This study is aimed “to measure relationship between services quality and satisfaction of customer through the mediating effect of disconfirmation in social security hospitals of Punjab”. Scale for each dimension used in this study is adopted from already used scales in literature, especially from the studies of [7, 8, 15, 16]. A questionnaire consisted
of 35 questions was made developed from these studies. Different questions were used to measure each dimension of SERVQUAL, disconfirmation and satisfaction of customers towards the services provided to them in hospitals.

A sample size of 100 respondents was used in this study. All of these respondents were patients admitted in social security hospitals of Lahore and Sialkot. Some face to face interviews and discussions were held with other patients in emergency and wards, to get through understanding of different issues faced by patients in these hospitals. Responses were evaluated on 5-point likert scale ranging from 1=strongly disagree to 5=strongly agree. SPSS software is used to analyze data to verify relationships between variables. As the data fulfills the underlying assumptions of mediation analysis, four steps of Baron & Kenny (1986) were used to find the evidence of mediating effect of disconfirmation on independent and dependent variables.

5. RESULTS

5.1 Reliability Analysis:
Reliability statistics as shown in table 1 depicts that Cronbach’s alpha is above 0.70 as reported by [17], which is an acceptable range as quoted in study conducted by [8].

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>0.750</td>
</tr>
<tr>
<td>Disconfirmation</td>
<td>0.756</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>0.854</td>
</tr>
</tbody>
</table>

5.2 Correlation Statistics:
Table-2 for correlation statistics shows that service quality and disconfirmation has a moderate positive relationship with each other at a 0.610 spearman’s rho at 0.01 significance level, showing that with the increase of service quality, positive disconfirmation towards customer satisfaction also increases. This finding escorts to the acceptance of research hypothesis H1 stating that “there is a positive relationship between service quality and disconfirmation”. Similarly, at 0.01 significance level service quality is strongly positively correlated with customer satisfaction at 0.719 spearman’s correlation coefficient. This escorts to the acceptance of H2 stating that “there is positive relationship between service quality and customer satisfaction.”

<table>
<thead>
<tr>
<th>Service Quality</th>
<th>Disconfirmation</th>
<th>Customer Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>ρ</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Sig. value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disconfirmation</td>
<td>ρ=0.510</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. value</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>ρ=.719”</td>
<td>.640*</td>
</tr>
<tr>
<td>Sig. value</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Table-2 also represents that correlation coefficient for disconfirmation and customer satisfaction is 0.640 at 1% significance level, showing that these are moderately correlated with each other. If there is a positive disconfirmation, customer satisfaction increases and negative disconfirmation will lead to lower customer satisfaction.

5.3 Multiple Regression Analysis:

<table>
<thead>
<tr>
<th>Paths</th>
<th>Coefficients</th>
<th>Se</th>
<th>t</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality to Disconfirmation (a paths)</td>
<td>.5593</td>
<td>.0784</td>
<td>7.1388</td>
<td>0.000</td>
</tr>
<tr>
<td>Direct Effects of Disconfirmation on Customer Satisfaction (b path)</td>
<td>.5947</td>
<td>.1201</td>
<td>4.9526</td>
<td>0.000</td>
</tr>
<tr>
<td>Total Effect of Service Quality on Customer Satisfaction (c path)</td>
<td>.9638</td>
<td>.1037</td>
<td>9.2919</td>
<td>0.000</td>
</tr>
<tr>
<td>Direct Effect of Service Quality on Customer Satisfaction (c’ path)</td>
<td>.6311</td>
<td>.1148</td>
<td>5.4960</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table-3 shows that all the paths (a, b, c & c’) satisfy the condition for partial mediation that mention that is all the four paths are significant then there exists the “partial mediation of mediator exists between the dependent and independent variables” as reported by Baron & Kenny (1986). However, in this study, Disconfirmation partially mediated the relationship between service quality and customer satisfaction.

Table-4 shows overall model significance. Adjusted R-square also depicts that 56% of the “variability in dependent variable” is explained by “the independent variables”.

4
Table-4: Model Summary

<table>
<thead>
<tr>
<th></th>
<th>R-sq</th>
<th>Adj R-sq</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.5757</td>
<td>.5669</td>
<td>65.7980</td>
<td>2.0000</td>
<td>97.0000</td>
<td>.0000</td>
</tr>
</tbody>
</table>

Table-5 shows that “there exists a significant mediation between the dependent (service quality) and independent variable (customer satisfaction).”

Table-5: Sobel Test

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>s.e.</th>
<th>Z</th>
<th>Sig (two)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sobel Test</td>
<td>.3326</td>
<td>.0823</td>
<td>4.0425</td>
<td>.0001</td>
</tr>
</tbody>
</table>

6. CONCLUSION

From above findings, it shows that majority of patients availing facilities from these social security hospitals seems to be satisfied from service provided to them. However, through face to face discussions it is found that there are poor hygienic conditions and cleanliness problems in wards. As this research was conducted on admitted patients, most of the patients were found satisfied with overall services of hospital. The main reason found behind their satisfaction was right diagnosis of doctors, free of cost treatment and lower perceived expectations about service quality. In developing countries like Pakistan major issue for poor people is cost and charges of their treatment, which they are not able to pay in private hospitals. As their expectations for service quality are low due to perception of free treatment in these social security hospitals, majority of them is satisfied with service provided in these hospitals, which is far better than the service being provided in public hospitals of the country. The overall quality model used in this study was found valid and reliable. However the “hospital needs to focus on improving the quality of their services” since it has been effecting and dealing with significant population of workers and their dependents. For future work a similar study can be carried out in the same region for privately owned hospitals to compare the service quality and the compare the levels of customer satisfaction and attitude of patients.

REFERENCES


