

Investigating Patient's Satisfaction in Perspective of Service Quality and Work Engagement of Nurses

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Abstract- Objective: Major focus of this research study is to investigate the impact of service quality dimensions on patient satisfaction and work engagement is a moderator variable. Place of study: Faculty of Management Sciences, RIPHA International University Islamabad. Duration of study: Study done from June 2021 to July 2022. Methodology: Major variables discussed and tested statistically in this research study include Tangible, Reliability, Responsiveness, Assurance, Empathy, Patient Satisfaction and Work engagement. Hypothesis tests shows that there is positive association between tangible service quality, Reliable Service Quality, Empathy service quality and Patient's satisfaction. The data was analyzed using SPSS and the frequencies of the tables were drawn to draw conclusions. Correlation was found among the values.

Results: Results also show that there is insignificant negative association between Responsive service quality and Patient Satisfaction when work engagement is involved as moderator. Association between Assurance service quality and Patient Satisfaction when work engagement is involved as moderator shows a visible negative significant association. Significant aspect of work engagement results is associated with negative significant association between Empathy service quality and Patient Satisfaction when work engagement is involved as moderator.

Conclusion: The service quality dimensions such as Empathy SQ, Tangible SQ, Responsive SQ, Assurance SQ and Reliable SQ has an impact on the patient satisfaction individually and collectively but in the presence of the moderator which in this case is work engagement has statistically insignificant impact on patient satisfaction as described in individual service quality dimension impact when moderator interacts.

Index Terms- Service Quality Dimensions, Patient's Satisfaction, Work Engagement, Nursing Process Theory.

I. INTRODUCTION

- II. The healthcare has been a very significant services industry in the hospitality where services are provided to the individual as a whole, family and the community. In this sector since the services are not in the form of material products it has been very difficult to analyze the quality of services provided to the patient as a recipient of these services and relate them to the customer's needs for what, The general program structure (2006-2015) and medium-term key arrangement (2008-2013) of World Health Organization (WHO) discovered more exact approaches to fortify the human services frameworks and administrations considering necessities, to accomplish worldwide objectives WHO reframed a specialized motivation to health out comes about guaranteeing the health to react to the present and up and coming difficulties as frame work. Invigorating services conveyance is essential to the accomplishment in the wellbeing of the patient which incorporate the conveyance of mediations to lessen the weight of sickness and the affected-ones.¹ Services arrangements or conveyance of these services is a quick yield of the contributions to the health framework, for example, the services workforce, acquirement of these services. Expanded data sources should prompt enhanced services conveyance and upgraded access to services.²
- III. Guaranteeing accessibility of health services that meet a base quality standard and anchoring approach to them are key elements of a health framework. These depend on the capacities characterized in World health report 2000, this report provides a system of interlinked process to improve which are called the building blocks these building blocks are: health services; healthcare human resource; data; therapeutic items, immunizations and advancements; financing; and authority and administration.³

- IV. The health system building blocks ensure a clear vision to adhere to WHO despite of their composition the aim is to provide services. Health services complies of compelling, safe, quality personal and non-individual wellbeing intercessions to the needy ones, the time and pace of requirement, with least misuse of assets.⁴ WHO prioritized the key factors that puts forward the measures that enhances the picture of service quality and recognized the service quality as one of the driving forces to enhance service delivery (World Health Organization, 2007).
- V. As according to Joint Commission for Accreditation of Health Care Organizations (1987) sited confirmation in both the engineering of goods and services, businesses show that quality is a key determinant of piece of the overall industry and quantifiable profit and in addition cost diminishment.⁵ Two types of quality value are pertinent to benefit giving association to services: specialized or technical quality and usable or functional quality. Specialized quality in the human services health conditions, additionally alluded to as quality truth be told, is characterized basically based on the specialized precision of the determinations and strategies. Different procedures for estimating specialized quality have been proposed and are presently being used in human services associations.⁶ Since this data isn't by and large accessible to the devouring open, information of the specialized nature of human services administrations stays inside the domain of medicinal services experts and executives.⁷
- VI. Practical quality alludes to the way in which the social insurance benefit is conveyed to the patient. Since patients are regularly unfit to precisely survey the specialized nature of a social insurance benefit, practical quality is normally the essential determinant of patients' quality recognitions.⁸ There is developing proof to propose this apparent quality is the absolute most critical variable impacting shoppers' esteem discernments. These esteem observations, thusly, influence shoppers' goals to buy items or services.

METHODS: The nature of this research study is explanatory because it develops hypothesis to analyze the association of various service quality dimension with patient's satisfaction and work engagement will be moderator in the model of this research study. Furthermore the hypothesis testing explains the significant, insignificant, positive and negative association between service quality dimen Type of this study is casual which focus on the impact of service quality dimension on patient's satisfaction with mediating role of nurse work engagement. This study is based upon proposed field survey and collect feedback from patients in the hospital setting. Data collected for

this research study is collected in the study period equal to two semesters. Patient selected for survey is based upon minimum three days stay in hospitals.

the sampling was that the patients were selected with minimum 3 days of stay in the hospital. and the nursing staff who cared for the patient was identified through duty rosters

Units of analysis in this study are patients who spend minimum two days at inpatient services department of selected private hospitals in Islamabad, Pakistan under the observation of a registered nurse.

Population considered in this research study include patients visiting private hospitals in Islamabad at medical in-patient department (IPD). Total in-patient days are on the basis of population approximation in the selected private hospitals in Islamabad, Pakistan.

Sampling technique used in this research study is random purpose sampling. Patient's feedback is obtained through survey questionnaire from the patients visiting selected private hospitals in Islamabad, Pakistan.

Appropriate sample are patients visiting selected private hospitals and on the basis of random based sampling technique as mention above survey questionnaire are distributed among 200 participants.

Measurement scale used in this research study for feedback of various questions associated with research variables is on the basis of 5-point Likert scale having range Strongly Disagree=1 to Strongly Agree= 5

RESULTS: Reliability Analysis

Case Processing Summary

		N	%
Cases	Valid	200	100.0
	Excluded ^a	0	.0
	Total	200	100.0

a. Listwise deletion based on all variables in the procedure.

The above table shows case processing summary where the number are respondents are 200. The number of valid cases is 200 and there are no excluded cases.

Reliability Statistics

Cronbach's Alpha	N of Items
.801	64

Reliability analysis helps in understanding whether a consistent coefficient inter-item relationship exists or not and how much is the designed research tool valid and reliable for proposed study based on the inter-item consistency ratio. After getting response from a sample of 200 respondents the data was analyzed using Cronbach Alpha reliability in SPSS V.17. As shown in the table above the value of Cronbach Alpha is **.801** which is an adequate reliable value and crosses the threshold value of **.70** or above. Which means more the value is closer to 1 greater is the research scale reliable for the study.

Correlations Analysis:

Correlations								
		Tangible SQ	Reliable SQ	Responsive SQ	Assurance SQ	Empathy SQ	Work Engagement	P Satisfaction
Tangible SQ	Pearson	1	-.008	.139*	.047	.062	.302**	.464**
	Correlation							
	Sig. (2-tailed)		.909	.050	.513	.380	.000	.000
	N	200	200	200	200	200	200	200
Reliable SQ	Pearson	-.008	1	.696**	.644**	.766**	.606**	.347**
	Correlation							
	Sig. (2-tailed)	.909		.000	.000	.000	.000	.000
	N	200	200	200	200	200	200	200
Responsive SQ	Pearson	.139*	.696**	1	.264*	.512**	.555**	.197*
	Correlation							
	Sig. (2-tailed)	.050	.000		.000	.000	.000	.005
	N	200	200	200	200	200	200	200
Assurance SQ	Pearson	.047	.644**	.264*	1	.725**	.288*	.274*
	Correlation							
	Sig. (2-tailed)	.513	.000	.000		.000	.000	.000
	N	200	200	200	200	200	200	200
Empathy SQ	Pearson	.062	.766**	.512**	.725**	1	.633**	.431**
	Correlation							
	Sig. (2-tailed)	.380	.000	.000	.000		.000	.000
	N	200	200	200	200	200	200	200
Work Engagement	Pearson			.302**	.606**	.555**	1	
	Correlation							
	Sig. (2-tailed)			.000	.000	.000		.000
	N			200	200	200		200
P Satisfaction	Pearson			.464**	.347**	.197**		1
	Correlation							
	Sig. (2-tailed)			.000	.000	.005		
	N			200	200	200		200

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The Pearson Correlation shows if there is linear relationship between the variables or not and also what is the extent of the relationship. It also shows whether the association between the

variables is positive or negative. In the table above in last row Tangible service quality has a correlation of **.464** at **p<.01** with Patient Satisfaction which is statistically significant and thus shows a visible positive association between the variables. Reliable service quality has a correlation of **.347** at **p<.01** with Patient Satisfaction which is statistically significant and shows positive association between the variables. Responsive service quality has a correlation of **.197** at **p<.01** with Patient Satisfaction which is statistically significant and shows weak positive relationship between the variables. Similarly Assurance Service Quality has a correlation of **.274** at **p<.07** with Patient Satisfaction which is statistically significant and shows a weak association between the variables. Empathy Service Quality has a correlation of **.431** at **p<.01** with Patient Satisfaction which is statistically significant and shows positive association between the variables. Work engagement has a correlation of **.546** at **p<.01** with Patient Satisfaction which is statistically significant and shows a positive association between the variables. All the variables above show positive association between variables with a significant t-test value of less than **.01**

4.3 Regression Analysis

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	Empathy SQ, Tangible SQ, Responsive SQ, Assurance SQ, Reliable SQ ^a		Enter

a. All requested variables entered.

b. Dependent Variable: P Satisfaction

The above table shows the variable entered in SPSS V.26 for running the regression analysis test on the data. Independent Variables entered are Empathy SQ, Tangible SQ, Responsive SQ, Assurance SQ and Reliable SQ while Dependent variable is Patient Satisfaction. And there was no variable removed during the process.

DISCUSSION: Past research studies shows that competent health authorities introduce various techniques including main focus on planning for good quality services to increase patient's satisfaction. Research studies also emphasizes on individual care givers, collaborative care givers, hospital nurses, and patient's satisfaction designs all have motivation to be keen on patient's satisfaction.⁸ In reality, contentions over the place of patient evaluations and reports in the list of healthcare results generally

turn on in the case of estimating patient's satisfaction is essential (Kravitz, 1998).⁹Patients visiting hospitals expects quality service in hospital which is more related to the encounters with nurses delivering healthcare services, the perceptions explicit expectations creates delinquencies in the hospital setting.¹⁰

This research study focus on quality of services provided by nursing staff in hospital fulfils patient desire need for services and its relationship with work engagement.^{11,12} Past research studies mentioned in the literature review of this research work shows that service quality and patient satisfaction is analyzed with combination of variables.¹³ These variables include hospital environment, service reliability and responsiveness; feedback, guidance and affordability also contributes as a majority. Major variables discussed in literature review and tested in results include Tangible, Reliability, Responsiveness, Assurance, Empathy, Patient Satisfaction and Work engagement.¹⁴ Now these variables will be discussed in this chapter systematically with reference to literature review and results from primary data to draw useful conclusion.¹⁵

Hypothesis 1 mentioned in the literature review of this research work focuses on the positive association of tangible service quality with patient's satisfaction. Calculations in the results and analysis chapter of this research work shows that coefficients table Tangible SQ un-standardized Beta value is **.137** with t-test value of **8.669** and significance of confidence interval value of **.000** which is less than the bench mark of **p<.05** is statistically significant.¹⁶This means that if there is one percent increase in tangible service quality, patient satisfaction will increase by **13.7%**. This shows a Positive association between Tangible service quality and Patient Satisfaction.¹⁷

As mentioned in the results and analysis chapter of this research work Tangible service quality is positively associated with patient's satisfaction. Furthermore regression analysis also shows that increase in tangible service quality directly increases patient's satisfaction. Patient's Satisfaction is critical issue in healthcare sector which is focused in past research which also helps healthcare service provider to assess staff performance.¹⁸ Latest research work recognizes SERVEQUAL as a modified shape of service quality dimensions (Parasuraman et al. 1988). SERVEQUAL is based upon five dimensions which are reliability, responsiveness, assurance, empathy and tangibles (Abuosi, & Atinga, R. 2013). Another research work based upon sample from Bangladesh which focuses on nursing services dimensions and focus on feedback from 400 patients from private hospitals also shows that Patient's Satisfaction is directly related to tangible service quality (Azmi, et. al., 2017) Numerous studies concluded that Patient's Satisfaction is the simple way to design new services according to patients needs.¹⁹

Hypothesis 2 focuses on association of Reliable service quality with Patient's Satisfaction which shows that Reliable Service Quality is positively associated with Patient's Satisfaction. The

term Reliability refers to real implementation of administration (Pollack, B., L., 2008). Results and analysis chapter shows that coefficients table Reliable SQ un-standardized Beta value is **B=.096** with t-test value of **t= 3.223** and significance of confidence interval value of **p=.001** which is less than the bench mark of **p<.05** meeting the assumptions and thus statistically significant. This means that if there is one percent increase in Reliable service quality, patient satisfaction will increase by **09.6%**.²⁰Furthermore research studies also shows that healing environment which focuses on physical setting to support patients and families during their visit to hospital. It is concluded that administration associated with healing facilities must be zero irregularity administration to patients. While friesner et al explained that satisfaction contribute towards increase in number of patients which decrease the cost of obtaining new customers in private hospitals.²¹

Furthermore healthcare data from Jordan shows that social insurance administration needs more prominent focus to achieve the desired results. Another study states that if service quality related to human changes into the need the results will be stress, slow patient recovery and increase in treatment cost.²²

Research studies also recognizes that in some cases Patient's attitudinal reaction towards their esteem judgments develop their perception about experience in a hospital associated with quality of administration. This study also explains that benefit quality tends to last longer as compare to satisfaction because benefit quality might be refreshed at every administration counter.

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