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Gaziosmanpaşa Üniversitesi Taşlıçiftlik Yerleşkesi
İktisadi ve İdari Bilimler Fakültesi İşletme Bölümü
60150 TOKAT

Tel: +90 356 252 16 16 - 2363

Fax: +90 356 252 16 73

E-Posta/E-Mail: <a href="mailto:stratejidergisi@gmail.com">stratejidergisi@gmail.com</a>

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# STRATEJİK YÖNETİM ARAŞTIRMALARI DERGİSİ

İçindekiler Table of Contents	Sayfa
	No.
Table of Contents	
	Page
	Num.
1. İmalat İşletmelerinde Dış Kaynak Kullanımının İşletme Verimliliği Ve Performansına Etkisi Üzerine Bir Araştırma	
A Research on Operational Efficiency and Performance of	
External Resource Using in Manufacturing Operations	1-20
Yasemin TATLI, Selçuk KORUCUK, Hamit ERDAL	1-20
2. Strategic Executive Audit Challenges In Organizations' Goal	
Accomplishment	
Organizasyonlarda Hedefe Ulaşmakta Stratejik Denetim	
Zorlukları	
Tansel ERKMEN	21-60
3. Stratejik Yönetimin Gelişim Süreci Ve Stratejik Yönetime	
Dair Literatürdeki Güncel Araştırma Konularının	
Sınıflandırılması	
Strategic Management Development Process And Classification	
Of Current Research Issues In The Literature Of Strategic	
Management	61-84
Murat ÇUBUKCU	01 01
4. Uyum Döngüsü: Örgüt-Çevre Uyum Sürecine İlişkin Bir	
Model	
Adaptive Cycle: A Model Of Organization-Environment	
Adaptation Process	85-112
Ersin IRK, Musa Said DÖVEN	
5. Nexus Between Service Quality Management And Patients'	
Satisfaction: A Case Of Agha Khan Hospital, Pakistan	
Hizmet Kalitesi Yönetimi İle Hasta Memnuniyeti Arasında İlişki:	
Pakistan Agha Khan Hastanesi Örneği	113-135
Farhan AHMED, Muhammad Farooq JAN, Ilknur OZTURK	

### Stratejik Yönetim Araştırmaları Dergisi

Journal Of Strategic Management Research Cilt / Vol.: 1, Sayı / Is.: 2, Yıl / Year: 2018, Sayfa / Pages: 113~135

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# NEXUS BETWEEN SERVICE QUALITY MANAGEMENT AND PATIENTS' SATISFACTION: A CASE OF AGHA KHAN HOSPITAL, PAKISTAN

Farhan Ahmed<sup>1</sup> Muhammad Farooq Jan<sup>2</sup> Ilknur Ozturk<sup>3</sup>

#### **Abstract**

This study aims to measure the internal service quality dimensions and patients satisfaction at the Agha Khan University Hospital, Karachi whereas service quality is defined as what the customer pays accordingly, he/she gets service. Data from 163 respondents was collected through a self-administered questionnaire consisting of 23 items on Likert scale. The overall reliability of the questionnaire is 0.85 (Cronbach's alpha). The findings show that tangibility-professionalism (H1a) and feedback-guidance (H1d) affect patients' satisfaction. Further, the results have shown significant relationship between SERVQUAL dimensions and patients' satisfaction.

**Keywords:** tangibility, professionalism, feedback, guidance, empathy, satisfaction

#### 1. Introduction

Gone are those days when organizations were just managing the operations of the businesses. These days' researchers have attracted the focus of the policy makers/stakeholders toward management of operations of business from top to bottom by considering the strategic management system. Strategic management system includes planning, executing and implementing the strategic goals devised from the mission and vision of the organizations. In this study, the authors have

<sup>&</sup>lt;sup>1</sup> SZABIST Karachi~Pakistan

<sup>&</sup>lt;sup>2</sup> Iqra National University, Peshawar-Pakistan

<sup>&</sup>lt;sup>3</sup> Cag University, Mersin ~ Turkey

focused on one of the major issues of the strategic management and that is service quality management. Like in other under developing economies, service quality management in health care industry in Pakistan has become a big issue; there are lots of problems being faced by patients. But some patients on the other hand are satisfied with the services which they get from hospitals which may depend on sociodemographic factor of the patients. According to Andaleeb (2001) the health care sector has a rapid growth in service economy. Padma et al., (2010) stated in developing countries heath care system is dependent on efficiency of management to increase and enhance the effectiveness of health care system, because of the fact that resources are not available according to the demand in service of healthcare institutions.

In developing countries more resources are used by health care institutions. The studies have indicated that health sector low performance is due to the inefficiency of management and technical system within the healthcare institutions, and there is not a proper utilization of resources resulting in wastage of the resources. Service quality management provide to patients and their satisfaction level are the critical component in planning processes because As technology advancement is increasing patients now have more information about the available resources, and if they do not get a satisfied service they have an option of switching or selecting an other health care institution. (Ramsuran-Fowdar, 2008). A satisfactory or a positive customer response affects the performance of the business involving the market share of the business, the profitability of the business, its productivity and reduced cost.

The critical relationship between the recruitment and recovery in the professionals of health care industry has become challenging task to solve in initial level from the administrators of the hospitals. The shortage of global nursing causes the situation to become worst. Moreover healthcare institutes are more concerned and are mostly

focusing on the financial performance of the institute rather than looking and enhancing the quality of services provided to patients whereas improvement and investment in technology and infrastructure can lead to some betterment of the health care service quality management. Some previous researches has indicate that unsatisfied and demotivated employees affects the health care performance indirectly, due to which the quality service had been affecting resulting directly in affecting the satisfaction of the patients of the healthcare institutes. One would expect that increasing the engagement of employees may benefit a health care organization and result in improved patient care and higher patient satisfaction. Therefore in order to improve the satisfaction level of the patients there is proper involvement of employees needed in the organization.

#### 2. Literature Review

In the light of service quality management, Parasuraman et al. (1985) applied the 10 dimensions of SERVQUAL model in the study by defining the attributes of all the dimensions in order to examine the gap between expectations and performance. For this, focus groups were set and three or four top management personnels from different organizations were called and distributed in twelve groups. The attributes discussed in the groups were about the perception service quality management and any discrepancies in the system. This study was exploratory study and for those 10 dimensions, seven new propositions with attributes were designed. Parasuraman et al. (1988) extended the research by introducing the new items into it. The questionnaire was developed based on 22 items divided into five dimensions of SERVQUAL. Four major businesses in the service industry were selected. Businesses include the bank, repairs and maintenance, Credit Card Company, a landline telephone company. After collecting the data, factor analysis was carried out and extracted five factors having the value more than **SYAD** 2018/2

0.5 then benchmark. The internal validity was exhibited in from the cronbach;s alpha that was more than 0.6.

Babakus and Mangold (1992) examined the perceptions of patients with respect to service quality in the hospital atmosphere. The data was collected through questionnaire with 15 items by setting the scale as Likert (strongly agree to strongly disagree). The reliability analysis (Cronbach;s alpha) of all the variables was greater than 0.5. The correlation and analysis were carried out to show the relationship between dependent and independent variables and to explore the determinants contributing to SERVQUAL.

Lim and Tag (2000) carried out the research on the hospital in Singapore by applying SERVQUAL and tried to identify the expectations and perceptions of the patients. The primary data was collected through a questionnaire (five point likert scale) consisted of 25 items. After further literature review another variable with accessibility and affordability (independent variable) was also included in the tool by adding three (on likert scale) questions hence causing the changes in original SERVQUAL.

Andaleeb (2001) found in their study the patient view that health care services are ignored in the underdeveloped countries. The study is mainly focused towards patient and also those factors that are most essential for the care of patient. The factor analysis and the multiple regressions have been done in the study. In the study it is found that there is strong bonding and associations in the patient satisfaction and the five dimensions.

Sohail (2003) examined the factors to be considered in SERVQUAL model. The study was undertaken on the hospitals in Malaysia to check the perception regarding service quality management of the hospitals. The data was collected through questionnaire by setting likert scale rating. The dependent variable of the study was patients' satisfaction.

The five dimension of SERVQUAI; tangibility, responsiveness, reliability, empathy and assurance were included in the questionnaire. The number of patients participated in the survey is 186 which means the response rate as 0.186. The average expectations regarding service quality by the patients participated is low. As for as the inter-item consistency was concerned, all the variables cronbach's alpha are acceptable (more than 0.6).

Mostafa (2006) carried a research in the public and private hospitals of Egypt in order to identify the perceptions of service quality by using the five dimension of SERVQUAL. The data collection tool was designed on likert scale rating. From twelve hospitals of Egypt, the total number of patients was 500. Out of 500, only 332 participated in the survey and filled the questionnaire. After factor analysis, three factors were determined that contributed in SEVQUAL model. The significant result was shown that means there is a difference in the service quality of private hospitals and government hospitals. Andaleeb (2001) applied the factor analysis in order to identify the dimensions contributing SERVQUAL model. This study was conducted in one of hospital in Dhaka in which the respondents were parents who had come along with their children (patients). After regression, the factor analysis was carried out. The model of the study has explained the variation of more than 67 percent in the dependent variable (patients' satisfaction). The variables tangibility and adequate input taken in the study has shown the insignificant results while the variables; the nurses' code of conduct and the behavior of doctors and facilities in fees payment have shown significant results.

Oliveria and Ferreira (2008) did the study in Brazil to measure the expectations and perceptions of service quality in higher education institutes. The study was carried out by using SERVQUAL model, the data was collected from the fresh students of engineering (production technologies). The number of respondents filled the questionnaire was

<u>SYAD</u>

2018/2

38. The questionnaire consisted of 19 items scaled on seven point – Likert scale. The results have shown that the negative gap among 19 items in the scale that there are higher the expectations of the fresh engineering students in comparison to perceptions about the service quality of the higher education institute.

Manaf and Nooi (2009) aimed to explore the dimensions important for SERVQUAL. The study was undertaken in the health care industry of Malaysia, in which the respondents were in-patients and out-patients. The survey was conducted through a questionnaire, after filtration out of 570 questionnaires of in-patients and 646 questionnaires of out-patients were brought in usable form. The factor analysis was done which resulted in two dimensions. First dimension is clinical service and another is physical service.

Karassavidou et. al., (2009) identified the dimensions of service quality by using SERVQUAL model. In the study, gap and factor analysis was done. In the gap analysis, the difference was identified between expectations and perceptions of the respondents participated in the survey. The data was collected through questionnaire based on seven point likert scales. In the questionnaire the section of perceptions and expectations was also included. The study was undertaken in the National Services Hospitals of Greek. The number of respondents was 137 from six hospitals situated in Greece (Northern). The cronbach's alpha for all the dimensions ranged from 0.78 to 0.99. Miranda et, al. (2010) conducted a study by applying SERVQUAL model in order to measure perception of doctors and patients, a gap analysis was done of their perceptions. The dependent variable taken was patients' satisfaction and the dimensions of SERVQUAL as independent variable. The independent variables include facilities like cleanliness, proper equipment and easy accessibility of the patients; doctors and nurses, efficiency (in terms of answering the patients' queries) and the role of administrative staff. The results of the study provided sufficient evidence to conclude that the gap exists between the perception of doctors and patients. Hence the statistics results show significant but negative numbers.

Yesilada and Direktor (2010) conducted a study by applying SERVQUAL model. The study was conducted in both public and private hospital. The respondents taken were from age above 18, 806 respondents submitted their responses out of 990 in whole Northern ~ Cyprus. The data was collected through a 22 items designed on five points ~ Likert scale (strongly agree, agree, nor agree nor disagree, disagree and strongly disagree). The major dimensions contributing in service quality were confidence, reliability, tangibility and empathy. Factor analysis was done in order to know the variance explanation. The gap analysis resulted that expectations can be met more from private hospitals than public hospitals.

Chakarborty (2011) found in his study that it should be known how patient perceive and evaluate the health care services, and that kind of awareness will help out the hospital administration to the service quality and satisfy the patients. In growing economies health care sector is expanding rapidly as their purchasing power has increased they demand high quality health care services.

Ahmed and Samreen (2011) tried to identify the factors contributing in knowing the patients satisfaction and service quality by using SERVQUAL model. In the study, systematic sampling technique was used by taking 252 outpatients' and their responses were collected from three different hospitals; hospitals were public, private and semi~public. In initial stage gap analysis was done and then the factor analysis was done in order to assess determinants contributing in the service quality and patients satisfaction. The factor analysis resulted in five determinants and these are tangibility and professionalism, reliability and responsiveness, assurance and empathy, feedback and guidance

**SYAD** 2018/2

and affordability. Regression model is the main finding of the study from three different types of hospitals that has statistically explored the significant determinants causing impact on patients' satisfaction as a whole.

#### 2.1 Service Quality in Health Care

Service quality can be simply defines that the customer will pay accordingly what he will get neglecting whatever the producer is producing. In this way, the service quality is always compared with the perception, expectations and performance. The best model in order to examine the different dimensions of service quality is SERVQUAL Many researches has indicated that good service quality results in increasing number of new customers and existing customers, enhanced profitability, an increased corporate image, cost cut down. Additionally retaining existing customers and having new customers is a result of long term profitability for a firm. Therefore service quality can be a source of competitive advantage as it can be used as a block to build an advantage against competitors which can be difficult for competitors to copy it and it can be proved as a source of sustainable competitiveness for an organization. (Lim and Tag,

Zeithaml and Bitner (2000) Explains how such intensions are expressed by customer in positive way: giving importance to the company over other, increasing the firms purchases, agreeing to pay premiums or admiring the firm. According to a researcher Clancy and Schulman, 1994, attracting new customer is costly and is five times than the cost of keeping its existing customer.

More over dissatisfaction of customer may affect the firm negatively as unfavorable Behaviour of customer may lead to negative word of mouth, preferring to an alternative option. Therefore it is important for healthcare provider to understand the expectations of the customers

and patients in order to gain from patients and building long term strong relationship.

#### 2.1.1 SERVQUAL Model

Parasuraman et al. (1988) extended the research by introducing the new items into it. The questionnaire was developed based on 22 items divided into five dimensions of SERVQUAL. Four major businesses in the service industry were selected. Businesses include the bank, repairs and maintenance, Credit Card Company, a landline telephone company. After collecting the data, factor analysis was carried out and extracted five factors having the value more than 0.5 then benchmark. The internal validity was exhibited in from the cronbach; salpha that was more than 0.6. The five dimensions of SEVQUAL are given as tangibility, reliability, empathy, assuarance and responsiveness. The tangibility includes (physical equipments and other facilities), reliability includes (accomplishment of promise kept before service), empathy ( care from the doctor, and other staff), assurance includes (mutual understanding and trust building among cutomer) and responsiveness includes (willing to help and guide customer properly). SERVQUAL is very reliable model, but inspite of that there are certains limitations and criticism on the model pointed by different school of thoughts. Brown et.al. (1993) identified that the perceptions and expectations are found through factor analysis but their reliability of the scales is very low. It may be because of positive correlation in the differences of the scales. Some theorists have criticized SERVQUAL on its dimensionalities. Professionally it's an inappropriate to measure service quality taking only limited dimesions. (Haywood, farmer and Stuart, 1988). Because of the particular services in the hospital, this model can't be generalized. (Vandamme and Leunis, 1993). Sohail, (2003) tried to examined all the five dimension of SERVQUAL in Malaysia in term of quality service management. The author did not confirm about the five dimensions. Ramsaran-Fowder (2005) identified the dimensions by

**SYAD** 2018/2

some changes in the actual model, but the authors concluded that this model is not only specifically used in health care industry. Mostafa (2006) tried to examine the dimensions of SERVQUAL through factor analysis but could confirmed about its sustainability regarding the perception, expectation and performance of service quality.

#### 2.2 Patients' Satisfaction

There are 3 reasons through which we can measure satisfaction of the patients: (a) the primary objective that a healthcare have is satisfaction of the patients: (b) we get relevant data about the processes outcomes and structures of the healthcare through patient satisfaction: (c) dissatisfied and satisfied patients have different behavioral intentions. Like patients who are highly satisfied usually recommend the physician or health care provider to their family, friends and relatives (Boudreaux & O'Hea, 2004). It is believed that the perception of patient about the service quality influence the satisfactory level of in a positive way, which affects the decision of patient positively when selecting a particular healthcare provider. (Andaleeb, 1992; Cronin & Taylor, 1994).

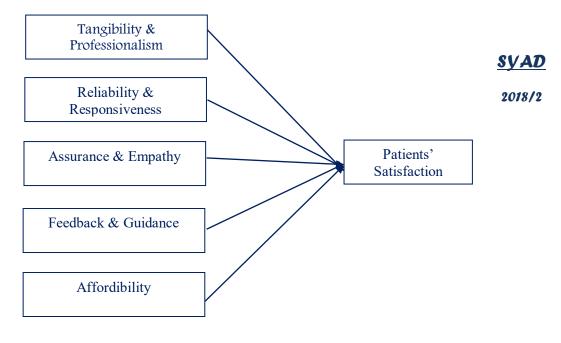
As for as the patients satisfaction is concerned actually it's one of key element under the umbrella of care. Hospital image is reflected by patients' satisfaction and thus affects the image of hospital and patients satisfaction increase the market share and profitability. (Andaleeb, 1992).

Customer satisfaction benefits the long term relationship of the healthcare provider as satisfied customer will have favorable and positive behavior towards a specific healthcare provider.

Satisfaction of customer reflects the healthcare provider in positive way as it will help to increase the quality of service provision. Usually satisfaction is the individual's judgment or decision which he gets after experiencing something. According to some theorists, satisfaction is a cognitive response whereas some others consider satisfaction as emotional attachment of individuals. Few researches suggest satisfaction as a cognitive response but on the other hand according to few researches satisfaction is a emotional attachment that an individual have.

Some literatures has showed satisfaction as cyclical model which determines and explains the relationship that customers satisfaction and customers loyalty have. Eventually, if the customer become loyal, he or she will definite prefer to come and get treated, if their expectations are meet regarding service quality.

#### 2.3 Theoretical Framework



**Independent Variables** 

Dependent Variable

(Source. Annieu and Sameen (2011))

Cilt / Vol.: 1, Sayı / Is.: 2, Yıl / Year: 2018, Sayfa / Pages: 113 ~135

#### Model of the Study:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Y is Patients' Satisfaction,  $X_1$  is TANG (Tangibility & Professionalism),  $X_2$  is RELIAB (Reliability & Responsiveness),  $X_3$  is ASSUR (Assurance & Empathy),  $X_4$  is FEED (Feedback & Guidance),  $X_5$  is AFFORD (Affordability) and  $\varepsilon$  is error term (stochastic factor)

#### 2.3.1 Hypothesis Developed

H1: SERVQUAL dimensions affect patients' satisfaction.

#### 2.3.1.1 Sub~Hypothesis

H1a: Tangibility and Professionalism positively affect patients' satisfaction,

H1b: Reliability and Responsiveness positively affect patients' satisfaction

H1c: Assurance and Empathy positively affect patients' satisfaction

H1d: Feedback and Guidance positively affect patients' satisfaction

H1e: Affordability positively affect patients' satisfaction

#### 3. Research Methodology

This study is quantitative followed by deductive approach and the objectives are of the study are achieved using primary data collected through a close ended structured questionnaire.

#### 3.1 Measurement

The questionnaire is based on five point – likert type scalewhere 1 = strongly disagree and 5= strongly agree. To measure service quality, the scale which is initially developed by Parasuraman et al. (1985, 1988, 1991) and adapted from Ahmed and Samreen (2011) for further use within the context of healthcare has been employed in identifying the critical factors of Service Quality.

#### 3.2 Sample

The variability of the population is unknown and sample size was considered as 200 with  $\pm$  5% Margin of Error based on non – probability convenient sampling. The target population is OPD (Out Patient Department) and their relatives who are involved in getting the service from the hospital management visits the consulting clinics of the Agha Khan University Hospital, Karachi during the operating hours in morning and evening. The reason of choosing patients' relatives is that they have come to know about the service and treatment being offered by the staff of hospital.

#### 4. Analysis and Results

The preliminary analysis is performed in which relaibaility and demographic profiling of the respondent have been computed. Furthermore, in order to test H1, multiple linear regression is applied respectively and hence discussed below step by step.

SYAD

2018/2

#### 4.1 Preliminary Analysis

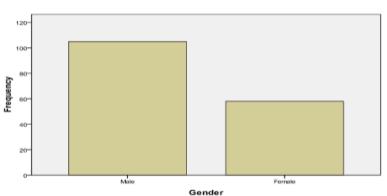
The overall reliability is showing the 0.853 Cronbach's Alpha, while the number of items included is 23. The Cronbach's Alpha for Tangibility and Professionalism is 0.653 the number of items included are six. The Reliability and Responsiveness is showing the 0.628 Cronbach's Alpha reliability, the number of items included are six. Assurance and Empathy are showing the 0.680 Cronbach's alpha and the number of items included are four. Feedback and guidance, Affordability, and patients Satisfactions are showing Cronbach's Alpha 0.437, 0.574, 0.492 with numbers of items included three, two, and two respectively.

Variable	Reliability (Cronbach's Alpha)	Number of Items
Tangibility and Professionalism	0.653	6
Reliability and Responsiveness	0.628	6
Assurance and Empathy	0.680	4
Feedback and Guidance	0.501	3
Affordability	0.574	2
Patients satisfaction	0.502	2

#### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	105	64.4	64.4	64.4
	Female	58	35.6	35.6	100.0
	Total	163	100.0	100.0	

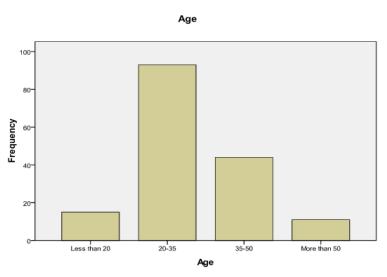




The results are showing the total number of patients participated in the study is 163. From 163 patients, number of male patients is 105 that are 64.4 percent and 58 female patients filled the questionnaire that is 35.6 percent. These statistics are showing that majority of the male patients visit the hospital.

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	-	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 20	15	9.2	9.2	9.2
	20~35	93	57.1	57.1	66.3
	35~50	44	27.0	27.0	93.3
	More than 50	11	6.7	6.7	100.0
	Total	163	100.0	100.0	



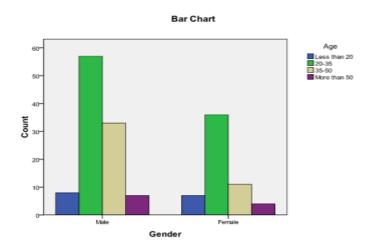
**SYAD**2018/2

Descriptive statistics for age is indicating that 15 patients are of the age group less than 20 that is 9.2 percent, 93 patients are of the age from 20 to 35 that is 57.1 percent, 44 patients are of the age from 35 to 50 that is 27 percent and 11 patients are of the age from more than 50 that is 6.7 percent.

Gender \* Age Crosstabulation

				Age					
			Less than 20	20~35	35~50	More than 50			
Gender	Male	Count	8	57	33	7	105		
		% within Gender	7.6%	54.3%	31.4%	6.7%	100.0%		
		% within Age	53.3%	61.3%	75.0%	63.6%	64.4%		
	Female	Count	7	36	11	4	58		
		% within Gender	12.1%	62.1%	19.0%	6.9%	100.0%		
		% within Age	46.7%	38.7%	25.0%	36.4%	35.6%		
Total	-	Count	15	93	44	11	163		
		% within Gender	9.2%	57.1%	27.0%	6.7%	100.0%		
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%		

The results of cross tabulations are indicating that 20-35 years of male and 20-35 years of female have participated more in the study.



#### 4.2 Hypothesis Testing

#### Model Summaryb

Mod	R	R		Std. Error		Change	e Stat	istics		Durbin-Watson
el		Squa re	d R Square	of the Estimate	R Squar e Chan ge	F Chan ge	df1	df2	Sig. F Chan ge	
1	.620 a	.384	.364	.49265	.384	19.58 0	5	157	.000	1.778

a. Predictors: (Constant), AFFORD, TANG, FEED, ASSUR, RELIAB

b. Dependent Variable: PTSATISF

#### **ANOVA**<sup>b</sup>

Model		Sum of Squares	đf	Mean Square	F	Sig.
1	Regression	23.761	5	4.752	19.580	.00 Oa
	Residual	38.104	157	.243		
	Total	61.865	162			

SYAD

2018/2

 $a.\ Predictors:\ (Constant),\ AFFORD,\ TANG,\ FEED,\ ASSUR,\ RELIAB$ 

b. Dependent Variable: PTSATISF

#### 4.2.1. Model of the Study:

Y (Patients' satisfaction) = 0.018 + 0.413 (Tangibility & Professionalism) + 0.156 (reliability & responsiveness) + 0.147 (Assurance & Empathy) + 0.151 (Feedback & Guidance) + (-0.03) (Affordability)

#### Coefficients<sup>a</sup>

Model		Unstand Coeffi		Standardize d Coefficients	t	Sig.		onfidence al for B
		В	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant	.018	.197		.093	.926	~.371	.408
	TANG	.413	.105	.326	3.921	.000	.205	.621
	RELIAB	.156	.102	.134	1.526	.129	~.046	.359
	ASSUR	.147	.083	.142	1.759	.080	~.018	.312
	FEED	.151	.065	.173	2.334	.021	.023	.279
	AFFORD	~.003	.042	~.004	~.068	.946	~.086	.081

a. Dependent Variable: PTSATISF

The regression analysis results indicate that the model is statistically significant (F = 19.580, p = .000). The R-square is 0.384 that is indicating that the model is not good fit. Furthermore, the predictor variables tangibility and Feedback are statistically significant with t-value 3.92 and 2.334 with the P-values 000, and .021 respectively.

#### Correlations

		TANG	RELIAB	ASSUR	FEED	AFFORD	PTSATIS F
TANG	Pearson Correlation	1	.609**	.545**	.379**	.206**	.550**
	Sig. (2-tailed)		.000	.000	.000	.008	.000
	N	163	163	163	163	163	163
RELIAB	Pearson Correlation		1	.557**	.487**	.259**	.495**
	Sig. (2-tailed)			.000	.000	.001	.000
	N		163	163	163	163	163
ASSUR	Pearson Correlation			1	.420**	.243**	.466**
	Sig. (2-tailed)				.000	.002	.000
	N		ı	163	163	163	163
FEED	Pearson Correlation				1	.247**	.420**
	Sig. (2-tailed)					.001	.000
	N		i	i	163	163	163
AFFORD	Pearson Correlation					1	.175*
	Sig. (2-tailed)						.026
	N					163	163
PTSATISF	Pearson Correlation						1
	Sig. (2-tailed)						
	N						163

<u>SYAD</u> 2018/2

The correlation for all the variables is significant. he strongest correlation is between the Tangibility and the Reliability is 0.609 significant at 1% level of confidence. The correlation between Reliability – Responsiveness and Patients satisfaction is 0.496 significant at 1% level of confidence which states that there is relationship between the independent variable and dependent variable. The correlation between Assurance - Empathy and Patients satisfaction is 0.466 significant at 1% level of confidence which states that there is positive relationship between the independent variable and dependent variable. The correlation between Feedback - Guidance and Patients satisfaction is 0.420 significant at 1% level of confidence which states that there is

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

relationship between the independent variable and dependent variable. The correlation between Affordability and Patients satisfaction is 0.175 significant at 1% level of confidence which states that there is relationship between the independent variable and dependent variable.

The overall reliability of the all the variables are 0.853 and that is more than the benchmark value for reliability and the number of items included is 6. Sohail, (2003) examined that all the variables cronbach's alpha are acceptable (more than 0.6). The results exhibit that out of 163 respondents 105 male participated and filled the questionnaire of the study in hand and the number of female respondents is 58. In this study, 93 patients who filled the questionnaire are of the age from 20 to 35 that is 57.1 percent. The results of cross tabulations are indicating that 20-35 years of male and 20-35 years of female have participated more in the study. The regression analysis results indicate that the model is statistically significant (F = 19.580, p = .000). The R-square is 0.384 that is indicating that the model is not good fit. Ahmed and Samreen (2011) statistically explored the significant determinants causing impact on patients' satisfaction as a whole.

The predictor variable tangibility and professionalism are statistically significant with t-value 3.92 with the P-values .000. Hence the H1a supports that tangibility and professionalism affect patients' satisfaction. The predictor variable reliability and responsiveness (H1b) are statistically insignificant with t-value 1.526 with the P-values .129. The results shows that assurance and empathy are statistically insignificant with t-value 1.759 with the P-values .080 and hence H1c is not rejected. The predictor variable feedback and guidance are statistically significant with t-value 2.334 with the P-values .021. Hence H1d supports that there is impact of feedback and guidance on patients' satisfaction.

The results shows that affordability is statistically insignificant with t-value ~.068 with the P-values .946. Hence H1e is not rejected which states that there is impact of affordability on patients' satisfaction. The correlation for all the variables is significant. The strongest correlation is between the tangibility and professionalism and the reliability and responsiveness (0.609) significant at 1% level of confidence. According to Andaleeb (2001), there is strong bonding and associations in the patient satisfaction and the five dimensions. The correlation statistics shows that there is positive relationship of tangibility and professionalism (Pearson Correlation = 0.550 at 0.01 level).

The results show that there is a positive relationship of reliability and responsiveness (Pearson Correlation = 0.495 at 0.01 level) on patients' satisfaction. The results show that there is a positive relationship of assurance and empathy (Pearson Correlation = 0.466 at 0.01 level) on patients' satisfaction. The results show that there is a positive relationship of feedback and guidance (Pearson Correlation = 0.420 at 0.01 level) on patients' satisfaction. The correlation statistics show that there is a positive relationship of affordability (Pearson Correlation = 0.175 at 0.05 level) on patients' satisfaction.

<u>SYAD</u> 2018/2

#### Conclusion

The idea of the study has focused on one of the major issues of strategic management that is service quality. This study tells about the dimensions and items of SERVQUAL model by Parasuraman et., al (1985, 1988). The results of the study show that tangibility & professionalism (H1a) and feedback & guidance (H1d) affect the patients' satisfaction whereas reliability & responsiveness (H1b), assurance & empathy (H1c) and affordability (H1e) do not affect patietts' satisfaction. The results of the study are in consistent with the study of Andaleeb (2001), Sohail (2003) and Ahmed and Samreen (2011). The results of the study suggest the hospitals management to

focus on increasing the professional behavior of the doctors as well as the nursing staff. Another major recommendation to the hospital management is work on the feedback and guidance towards patients and the nears and dears taking them to the hospitals. In this study, other dimensions can be added like accessibility, food & meals, etc., in order to get high reliability of the scale. Conformity and exploratory factor analysis can be carried out in order to know the gap about the perceptions, expectations and performance. This study is limited to only private hospital; the domain of the study can be increased by taking the sample from other private, public and semi-public hospitals of Pakistan. Systematic sampling or random sampling technique can be carried out in order to generalize and get the better results of the study. The questionnaire can be developed in local languages to get the cut off reliability of all the variables. Surgery and ward patients can be included in the study. Along with collecting quantitative (primary) data through questionnaires, qualitative data can be collected through interview from patients.

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Management Practice

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SYAD

2018/2