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Research Article

**PATIENT PERCEPTION ABOUT QUALITY OF SERVICES
PROVIDED BY PHYSICAL THERAPIST: A CROSS
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Khalid, Dr Komal Razaq**
The University of Faisalabad**Article Received:** February 2021**Accepted:** February 2021**Published:** March 2021**Abstract:**

Background: Patient's satisfaction can be one of the most important indicator about the quality of service. The purpose of this Research is to investigate patient's attitude towards service quality and its impact on their expectations. Quality of service defined as an overall judgment of service attitudes related to patient satisfaction. The scale usually used to measure quality of service is SERVQUAL.

Objective: current study aimed to identify the service quality level provided by the physical therapy centers.

Material and method:

A total sample of 102 male and female patients will be selected. All the data are obtained by using a self-reported questionnaire. SERVQUAL (service quality) questionnaire.

Outcome measures: Data will be calculated by assessing patient response through SERVQUAL (service quality) questionnaire.

Key words: Quality, patient's perception, services, physical therapy.

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INTRODUCTION:

Patient satisfaction with medical care is the most commonly measures patient attitude. Work in this field has markedly increased in past decades. Consumers are more sophisticated about the care type they receive. The health care providers are becoming more conscious to their concerns (Cleary and Mcneil, 1988). Good service delivery is a winning strategy. Quality service develop customer's confidence and it is beneficial for financial achievements. Good services are a profitable strategy. It results in more business with pre-existing customers and bringing in new customers (Berry, et al., 1994). Good services required for building of an organization. In which participating people are challenged to give their maximum potential level. which are recognized and rewarded when they do (Berry, et al., 1994).

Service is an important component. It enhances any company's success. To the people who are receiving services results is the beneficial factor received for endured burden such as money, an unfriendly employee. inconvenience of location or a limited facility of services. Good service quality will help us in achieving benefits and reducing the price for the customers (Berry, et al., 1994). Following are 5 principal dimensions which customers used to judge the quality. Tangibles is the visual look of physical therapy treatment room, modalities, communication material and personnel. Reliability domain is the ability to perform services at committed time with accuracy and dependency. Responsiveness domain is the desire to help out the customers. Assurance is the courtesy and knowing about employees and their abilities to work with self confidence and trust. Domain of Empathy is attention given to customers and providing care. (Berry, Zeithaml and Parasuraman, 1990).

Health care services are continuously improving their services for their existence and to remain open that's why they are paying more attention to the quality of service. According to known and Kim services quality is greatly affected by waiting, cost and time. It's very difficult for us to define the expectation about quality of a patient but attempts have been made to explain it through different point of views which is expectation of patient before treatment and their satisfaction after the services. Expectations of patients vary from time, context and other characteristics. Every person has different expectations. According to Kotler and Armstrong service is a benefit that can't be touched and is does not depend on the product Disabilities and physical limitation affects a person's quality of life. Physical

therapy and rehabilitation centers service helps to solve these problems and improve individual's quality of life (Ö. Güllü, et al., 2017).

Measures of hospitals economical or financial success indicates the strength and weakness of the organization. It depends upon the service quality which provided. Measurements are needed to guide the change but service quality can be difficult to measure. Easiest for assessment are the perception of the clients receiving or providing the services. Govt hospitals are the main areas but differ widely in facilities and services. The quality that they are providing independently assessed. Poor expectations of service quality can adversely affect a patient attendance and satisfaction with treatment. There were noticeable differences between hospitals in the quality perceived (M. Li, et al., 2015).

Personal attributes of the physical therapist and are way of care are the key factors of the satisfaction of patients. An unusual finding was the outcome of care was inconsistently and infrequently linked with patient satisfaction. Physical therapist by understanding and optimizing these determinants can enhance the quality of patient-centered care process (J. M. HushK. Cameron and M. Mackey, 2011) Patient perception is response about experience that is related to one single episode of care or multiple episodes of care. Perception is result pf patient expectations and experience. perception of patient depends on patient need and seriousness of illness, the choices they have, there past experience and their social demo-graphical factors (Sofaer and Firminger, 2005).

Patient focus is on two things loyalty and satisfaction. A strategy which is well practiced helps to achieve patient satisfaction and also help to in case patient loyalty. Patient satisfaction will reduce the risk of losing patient due to poor quality. This will improve organizational and financial performance (Al Azmi, et al., 2012).

There is a relationship between prior experiences and underlying attitudes toward the health personnel and health care system which influence judgments of satisfaction with current care. Consumers consistently tend to report less satisfaction with health care and physician generally than with current care. And the relationship existence between such direct and indirect measures has been demonstrated (Oberst, 1984).

Service quality is the judgment of attitude of service and satisfaction of patients related to their problems. It has two dimensions which are outcome quality, technical, functional and process quality. In technical quality there is conformation with specifications and accuracy in the medical procedures. In functional quality services are provided to patients. There are many trends of management of the patient satisfaction and expected services to take most attention by managers and researcher in the hospitals. In health care centers the measurement of service quality is very important due to the hospitalization and the patients' lives and their demanded expectations. The most accurate instrument for checking quality of services is SERVQUAL. It tells the difference between patient perception and their expectations relevant to service quality. The satisfaction of customer is an attitude that have positive and negative feelings presented by the patients in order to receive services (N. Al Azmi, et al., 2012).

In health care centers the calculation of quality of service is very significant because of the hospitalization and the patients' lives and their demanded expectations. The most accurate instrument for service quality is SERVQUAL. It measures the difference between patient perception and their expectations relevant to service quality. The satisfaction of customer is an attitude that have positive and negative feelings presented by the patients in order to receive services. Quality management is done when customers satisfaction and hospitals objectives are met. Quality can be improved by doing continuous improvement in organizational process equipment's or the services (Al Azmi, et al., 2012).

Swartz and Brown observed that patient perception about service frequently differ from physician's perception and moreover that physician's often miss perceive their patient evaluations. This gap may have detrimental consequences for success of practice and patient satisfaction. This gap may not be noticed until it's too late for the practitioner to solve it. As a result, health care providers may bear the burden of having dissatisfied patients including negative comments and patient turnover. Because of its importance a "service quality" a concept described by researchers (McAlexander, Kaldenberg and Koenig, 1994).

Excellent service can also be beneficial because it is responsible for an organization success. Organizational system in which participants are challenged to perform their maximum capacity level and they are appreciated and rewarded when they do

(L. L. Berry, Parasuraman and V. A. Zeithaml, 1994).

Physical therapy is an important component of the acute care of patients. The goals of physical therapy during acute care period following THR are usually to educate the patient on exercises and to increase mobility as well as precautions and preparations for discharge. Criteria for discharge that are dependent on physical therapy include the ability of the patient to physically demonstrated precautions, transfer independently, verbally state total hip precautions, ambulatory independence and perform a home exercise plan independently. Physical therapist plays a major role in educating patients. The use of physical therapy may decrease total cost of care for the patients in acute care phase by accelerating the time of discharge by decreasing the length of hospital stay (J. K. Freburger, 2000).

METHODOLOGY:

Study design: This research is a survey-based study with an aim to learn about patient attitudes toward the services and level of patient satisfaction.

Study population and setting: study population include female and male patient who receiving physical therapy. All the patients for data collection will be chosen from MTH, DHQ, ALLIED, and FAISAL hospital of Faisalabad.

Sample size: A total sample of 102 male and female patients will be selected.

Sampling technique: convenient sampling technique.

Data collection method: both female and male patient will be included in study after taking informed consent. Before giving informed consent to patients they will be educated about the study measures, purpose and method. Participants who will lie within criteria of inclusion will be given the questionnaire. Ask them to join the study if they are willing. 95 participants who fulfill the criteria of inclusion is included.

Data collection tool:

SERVQUAL (service quality) questionnaire.

Duration: This study will be completed within duration of four months after the research committee approval. During these four months' time duration data will be calculated by assessing patient response through SERVQUAL questionnaire.

Data analysis procedure: collected data will be analyzed by using following statistical tool.

- SPSS version-20

SPSS (Statistical Techniques and Methods)

Quantitative data was collected through interview. The data collected was calculated with the help of Statistical Package for Social Sciences (SPSS). For the ambition of analysis and comparison of data, related to personal characteristics of the respondents, simple percentage was calculated. Percentages were calculated with the following formula.

Percentage = $F/N \times 100$ Where:

F = is the frequency N = is the total numbers

Screening of study population: screening population will be done by using inclusion and exclusion criteria.

Inclusion criteria:

1. Patient receiving physical therapy treatment.
2. Female and male
3. Patient between age 30 and 60.

Exclusion criteria

1. Mentally unstable patients.
2. Refusal to consent.

Correlation analysis

Correlation evaluations are related that treat with relation between variables. The coefficient of correlation is really a part of linear allied between a

RESULTS:**Table 1: 3.1** Frequencies

Statistics		Reliability	Responsiveness	Assurance	Empathy	Tangibles
N	Valid	102	102	102	102	102
	Missing	0	0	0	0	0
Mean		4.7333	4.6495	4.6446	4.7490	4.4681
Median		4.8000	4.7500	4.7500	4.8000	4.5000
Std. Deviation		1.03611	.41515	.37961	1.09425	.45554
Skewness		7.599	-1.174	-.983	8.224	-.699
Std. Error of Skewness		.239	.239	.239	.239	.239
Kurtosis		70.234	1.311	.705	77.905	.369
Std. Error of Kurtosis		.474	.474	.474	.474	.474
Range		10.80	2.00	1.75	11.40	2.00
Minimum		3.40	3.00	3.25	3.60	3.00
Maximum		14.20	5.00	5.00	15.00	5.00
Sum		482.80	474.25	473.75	484.40	455.75

Summary of the Frequency Statistics of Dependent and Independent Variables:

A lot of brief elucidating coefficients that abridges a given informational index, which can either show the

two and couple of variables. Values of the coefficient of correlation are generally always including -1 in addition to +1. A correlation coefficient of +1 show that a variable are generally connected in a positive linear good sense, a correlation coefficient of -1 indicates that a two variables are generally perfectly connected in a negative linear good sense, and any 0 indicates of correlations that there is no linear relationship between two specifics.

Regression Analysis:

Regression analysis is usually a stats process working to estimate the connection among specifics. Regression analysis is used when we have to find the connection between a new dependent variable and a number of variables which are independent. Regression evaluation shows all of us that how a value associated with dependent data changes regarding change in the independent variable. The dependent variable is often denoted by means of y though independent variable is denoted by means of x. You will determine two types of regression; linear regression along with multiple regression. In linear regression there is commonly one variable and one independent variable. While in multiple regression there is one dependent variable and several independent as is this study there is one dependent variable that's KSE 100 directory returns, and two independent variable which is KIBOR rate and US \$direct quoted price so multiple regression is used.

whole populace or an example. The measures used to portray the informational index are proportions of focal propensity and proportions of inconstancy or scattering. To investigate the qualities aftereffect of

respondents the enlightening measurements will be utilized to discover the rate and frequencies.

The mean is the average of the numbers: and Calculated as $AM = \Sigma X / N$

Where;

AM = Arithmetic mean

N = number of observations

ΣX = sum of variables

Median relating to a value or quantity lying at the midpoint of a frequency distribution of observed values or quantities,

Standard Deviation is a statistic used to measure dispersion or changes in a distribution or data, equal to the square root of the arithmetic mean of the squares of the deviations from the arithmetic mean.

$$\sigma = \sqrt{\frac{\sum (x - \mu)^2}{N}}$$

X show each value in the population, μ is the mean value of the population, Σ is the total, and N is the number of values in the population.

The table above provides the frequency statistics, limits of mean scores were determined according to the following Reliability, responsiveness, Assurance, Empathy, Tangibles between Mean, Median, Std. Deviation etc.

Table 2: Frequency Table

Table 2.1 :Reliability

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3.40	1	1.0	1.0	1.0
3.60	1	1.0	1.0	2.0
3.80	3	2.9	2.9	4.9
4.00	11	10.8	10.8	15.7
4.20	9	8.8	8.8	24.5
4.40	9	8.8	8.8	33.3
4.60	12	11.8	11.8	45.1
4.80	7	6.9	6.9	52.0
5.00	48	47.1	47.1	99.0
14.20	1	1.0	1.0	100.0
Total	102	100.0	100.0	

Table 2.2 Responsiveness

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3.00	1	1.0	1.0	1.0
3.75	4	3.9	3.9	4.9
4.00	8	7.8	7.8	12.7
4.25	11	10.8	10.8	23.5
4.50	19	18.6	18.6	42.2
4.75	12	11.8	11.8	53.9
5.00	47	46.1	46.1	100.0
Total	102	100.0	100.0	

Table 2.3: Assurance

	Frequency	Percent	Valid Percent	Cumulative Percent
3.25	1	1.0	1.0	1.0
3.75	2	2.0	2.0	2.9
4.00	9	8.8	8.8	11.8
4.25	9	8.8	8.8	20.6
4.50	25	24.5	24.5	45.1
4.75	15	14.7	14.7	59.8
5.00	41	40.2	40.2	100.0
Total	102	100.0	100.0	

Table2: Empathy

	Frequency	Percent	Valid Percent	Cumulative Percent
3.60	2	2.0	2.0	2.0
3.80	4	3.9	3.9	5.9
4.00	7	6.9	6.9	12.7
4.20	5	4.9	4.9	17.6
4.40	12	11.8	11.8	29.4
4.60	15	14.7	14.7	44.1
4.80	19	18.6	18.6	62.7
5.00	37	36.3	36.3	99.0
15.00	1	1.0	1.0	100.0
Total	102	100.0	100.0	

	Frequency	Percent	Valid Percent	Cumulative Percent
3.00	1	1.0	1.0	1.0
3.25	2	2.0	2.0	2.9
3.50	2	2.0	2.0	4.9
3.75	1	1.0	1.0	5.9
4.00	17	16.7	16.7	22.5
4.25	20	19.6	19.6	42.2
4.50	18	17.6	17.6	59.8
4.75	14	13.7	13.7	73.5
5.00	27	26.5	26.5	100.0
Total	102	100.0	100.0	

Correlation Analysis:

The correlation measures the strength and linear relationship between two variables. The linear correlation sometime referred to as the Pearson correlation.

It is represented as “r”. The value of r is such that less than 1. The correlation between two variables may be (+ve) or (-ve).

Positive correlation:

If x and y have a strong positive correlation, the r is close to +1. If it exactly 1 the relationship indicates perfect positive fit. The positive relationship indicates that if value of x will increase, then value of y will increase.

Negative correlation:

If y and x have a strong negative correlation, the r is close -1. If it is exactly 1 the relationship indicates perfect negative fit. The negative relationship indicates that if value of x will increase than the value of y will decrease.

No correlation:

If there is a weak correlation means r is close to 0. A value near to zero means there is nonlinear relationship between two variables.

	Stock Index	Interest Rate	Exchange Rate
Stock Index	1		
Interest Rate	0.6789	1	
Exchange Rate	0.5896	0.7820	1

There are two types of correlations which usually used in the analysis. One is direct correlation which is constructive and other is indirect correlation which is unconstructive. I am here using the correlations to know about the direction of the variables and its strength of the variable.

Correlation < 0.20	Weak relation
Correlation ≥ 0.2 but < 0.5	Moderate relation
Correlation ≥ 0.5 up to	Strong relation

Correlation Table Analysis:

By examining the data and using correlation test we saw that both our correlations are positive to each other. The correlation is Strong because both values are very close to 1 which also means that dependent variable and independent variable are strongly correlated to each other.

Table 3: Correlations

		Reliability	Responsiveness	Assurance	Empathy	Tangibles	Patient Satisfaction
Reliability	Pearson Correlation	1	.127	.240*	-.019	.035	.031
	Sig. (2-tailed)		.203	.015	.849	.725	.760
	N	102	102	102	102	102	102
Responsiveness	Pearson Correlation	.127	1	.309**	.216*	.228*	.096
	Sig. (2-tailed)	.203		.002	.029	.021	.335
	N	102	102	102	102	102	102
Assurance	Pearson Correlation	.240*	.309**	1	.098	.252*	-.019
	Sig. (2-tailed)	.015	.002		.328	.011	.853
	N	102	102	102	102	102	102
Empathy	Pearson Correlation	-.019	.216*	.098	1	.106	-.015
	Sig. (2-tailed)	.849	.029	.328		.289	.879
	N	102	102	102	102	102	102
Tangibles	Pearson Correlation	.035	.228*	.252*	.106	1	-.022
	Sig. (2-tailed)	.725	.021	.011	.289		.827
	N	102	102	102	102	102	102
Patient Satisfaction	Pearson Correlation	.031	.096	-.019	-.015	-.022	1
	Sig. (2-tailed)	.760	.335	.853	.879	.827	
	N	102	102	102	102	102	102

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

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

Correlation Table Analysis:

By analyzing the data and using correlation test we found that both our correlation is positive strong relative to each other. The correlation is Strong also shows that dependent variable and independent variable are strongly correlated to each other.

Table 4: Regression

Variables Entered/Removed			
Model	Variables Entered	Variables Removed	Method
1	Tangibles, Reliability, Empathy, Responsiveness, Assurance ^b		Enter

a. Dependent Variable: Patient Satisfaction

b. All requested variables entered.

Regression Analysis:

By analyzing the data and using regression test a. Patient's satisfaction and b. all variables.

Table 5: Model Summary

Model	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. F Change	
1	.122 ^a	.015	1.09487	.015	.292		96	.916	1.863

a. Predictors: (Constant), Tangibles, Reliability, Empathy, Responsiveness, Assurance

b. Dependent Variable: Patient Satisfaction

Table 6: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.750	5	.350	.292	.916 ^b
Residual	115.078	96	1.199		
Total	116.828	101			

a. Dependent Variable: Patient Satisfaction

b. Predictors: (Constant), Tangibles, Reliability, Empathy, Responsiveness, Assurance

By analyzing the data and using regression test a. Patients satisfaction and b. tangibles reliability, empathy, responsiveness, assurance.

Table 7: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.852	1.718		2.242	.027
	Reliability	.029	.109	.028	.266	.791
	Responsiveness	.321	.285	.124	1.123	.264
	Assurance	-.146	.315	-.052	-.463	.645
	Empathy	-.032	.102	-.033	-.315	.754
	Tangibles	-.082	.251	-.035	-.326	.745

a. Dependent Variable: Patient Satisfaction

Table 8: Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.8990	4.5787	4.2824	.13163	102
Residual	-1.15271	9.90272	.00000	1.06742	102
Std. Predicted Value	-2.912	2.251	.000	1.000	102
Std. Residual	-1.053	9.045	.000	.975	102

Dependent Variable: Patient Satisfaction

Regression Table Analysis

Firstly, R Square comes; The significance of F value from our results is 0.00031 which is less than 0.05 and almost equal to zero so we can say that our relation is significant, because the value which is below or less than 0.05 will be called significant and the value which is above or greater than 0.05 will be insignificant. R value is 0.015.

Coefficient shows that there is a change in the dependent value, by change of 1 unit in independent variable. So in compliance with our results we reject the Null Hypothesis (Ho) and we will accept the Alternative Hypothesis (H1).

Table 8: Reliability**Scale all Variables****Case Processing Summary**

		N	%
Cases	Valid	102	100.0
	Excluded	0	.0
	Total	102	100.0

a. List wise deletion based on all variables in the procedure.

Table 9: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.059	.059	2

Table 10: ANOVA with Friedman's Test

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig
Between People		116.067	101	1.149	8.849	.003
	Between Items	10.373 ^a	1	10.373		
Within People	Residual	109.187	101	1.081		
	Total	119.560	102	1.172		
Total		235.627	203	1.161		

Grand Mean = 4.5078

a. Kendall's coefficient of concordance $W = .044$.

Table 11: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
9.595	9.595	1	101	.003

Table 12: Responsiveness**Case Processing Summary**

		N	%
Cases	Valid	102	100.0
	Excluded	0	.0
	Total	102	100.0

List wise deletion based on all variables in the procedure.

Table 13: Responsiveness Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.122	.176	2

Table 14: ANOVA with Friedman's Test

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig
Between People		71.462	101	.708	10.068	.002
Within People	Between Items	6.875 ^a	1	6.875		
	Residual	62.774	101	.622		
	Total	69.649	102	.683		
Total		141.111	203	.695		

Grand Mean = 4.4659

a. Kendall's coefficient of concordance $W = .049$.**Table 15: Hotelling's T-Squared Test**

Hotelling's T-Squared	F	df1	df2	Sig
11.062	11.062	1	101	.001

Table 16: Assurance**Case Processing Summary**

		N	%
Cases	Valid	102	100.0
	Excluded	0	.0
	Total	102	100.0

Table 17: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.024	-.038	2

The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item coding's.

Table 18: ANOVA with Friedman's Test

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig
Between People		64.927	101	.643	9.332	.002
Within People	Between Items	6.693 ^a	1	6.693		
	Residual	66.456	101	.658		
	Total	73.149	102	.717		
Total		138.075	203	.680		

Grand Mean = 4.4635

a. Kendall's coefficient of concordance $W = .048$.**Table 19: Hotelling's T-Squared Test**

Hotelling's T-Squared	F	df1	df2	Sig
10.172	10.172	1	101	.002

Table 20: Empathy**Case Processing Summary**

		N	%
Cases	Valid	102	100.0
	excluded	0	.0
	Total	102	100.0

a. List wise deletion based on all variables in the procedure.

Table 21: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized items	N of Items
-.031	-.031	2

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item coding's.

Table 22: ANOVA with Friedman's Test

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig
Between People		117.070	101	1.159	8.595	.003
Within People	Between Items	11.107 ^a	1	11.107		
	Residual	120.693	101	1.195		
Total		131.800	102	1.292		
Total		248.870	203	1.226		

Grand Mean = 4.5157

a. Kendall's coefficient of concordance $W = .045$.

Table 23: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
9.294	9.294	1	101	.003

Table 24: Tangibles**Case Processing Summary**

		N	%
Cases	Valid	102	100.0
	Excluded	0	.0
	Total	102	100.0

a. List wise deletion based on all variables in the procedure.

Table 25: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized items'	N of Items
-.032	-.045	2

The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item coding's.

Table 26: ANOVA with Friedman's Test

		Sum of Squares	df	Mean Square	Friedman's Chi-Square	Sig
Between People	Between Items	67.811	101	.671	2.503	.114
	Residual	1.760 ^a	1	1.760		
Within People	Total	69.976	101	.693		
	Total	71.736	102	.703		
Total		139.547	203	.687		

Grand Mean = 4.3752

a. Kendall's coefficient of concordance $W = .013$.

Table 27: Hotelling's T-Squared Test

Hotelling's T-Squared	F	df1	df2	Sig
2.541	2.541	1	101	.114

DISCUSSION AND CONCLUSIONS:

P value for reliability and responsiveness is less than 0.05 thus we reject the null hypothesis that is Quality of service does not affect patient's satisfaction about physical therapy and we will accept alternate hypothesis that Quality of service does affect patient's satisfaction about physical therapy. Tangibles have P value greater than 0.05 which are .114. Tangibles has less patient satisfaction score because patients are undecided or not agree about the (physical facilities, equipment's and communication material). Hospitals management should focus on improving overall service quality and make changes according to which domain is causing dissatisfaction among patients.

Current data supported first hypothesis. That is a statistically significant impact was found of dimensions of service quality scale on the patient satisfaction. The result of this research shows that greater attention to service quality scale domains (i.e. reliability, responsiveness, assurance, empathy and tangibles) would increase patient's satisfaction. In addition, the findings of this research is continues with a research by De Man et al. (2002) that examined the importance of different dimensions of service quality (Tangibles, Assurance, Reliability, Responsiveness, Empathy and Convenience) by studying their relation with patient satisfaction, and show that patient satisfaction and perception of service quality was correlated specially in reliability and tangibles-assurance. Moreover, this result is consistent with a study by Naik et al. (2010) that conducted a study to know service quality (SERVQUAL) dimensions (tangibles, reliability,

responsiveness, empathy, assurance) that make valued customers satisfied, as well as to identify about service quality domains that are significant in influencing customer satisfaction. Naik et al.'s (2010) study concluded that domains of service quality have a positive impact and are significant in increasing customer satisfaction.

The impact of reliability, responsiveness, empathy, assurance, tangibles on patient satisfaction was supported by current data. That is, a statistically vital impact of tangibles, assurance, reliability, responsiveness and empathy on patient satisfaction was found in this study. In addition, the findings indicate that assurance dimension was correlated most strongly with patient's satisfaction. In relation to tangibles (facility of hospital) this finding does not support the findings of a study by Kim et al. (2008), which indicated that facilities of hospital have no effect on patient's satisfaction. Concurrently, Kim et al. (2008) findings indicated that reliability, value of care, procedure of care and revisit intention were shown to have a positive impact on satisfaction of patient's. Lonial et al.'s (2010) study revealed that there is no relation was found between service quality and revisit plan significantly. In a study by Pakdil and Harwood (2005), it was found that one of the most significant indicators of satisfaction of patient was "the quality of the physician-patient interaction" – assurance and empathy are main domains. This study determined the same result. That is, assurance and empathy dimensions were found most important to increase patient's satisfaction.

As the findings of this study can help as a guide for hospitals' managers to improve customer's satisfaction and service quality attributes; managers should give importance to the all domains of service quality in order to improve level of satisfaction and quality continuously. Quality-related surveys should be conducted to take corrective actions if there is any type of difference between expectations and perceptions of the patients towards service quality. Based on the results of the research the researches recommend that managers of the hospitals should recognize vital priorities that help in improving and enhancing patient's satisfaction; managers also have to be aware by assessing their patient's attitudes towards service quality domains such as reliability, tangibles, responsiveness, assurance and empathy.

RECOMMENDATIONS:

In addition, the sample of this research is limited to 4 hospitals in Faisalabad Subjects of this region have a sub-cultural service and patient's attitudes differ from other regions in Pakistan. Thus, in order to generalize the results of this research, it is recommended that similar studies should be escorted in other hospitals. Future research could also investigate employee's attitude of perceived service quality, and compare findings with attitudes of patients in order to identify differences between them. Finally, other factors that may affect the satisfaction level can be assessed in future research.

REFERENCES:

1. Al Azmi, N., et al. 2012. Patients attitudes toward service quality and its impact on their satisfaction in physical therapy in KSA hospitals. *European Journal of Social Sciences*, 34(2), PP300-14.
2. Almeida, R. S., Nogueira, L. A. & Bourliataux-Lajoine, S. 2013. Analysis of the user satisfaction level in a public physical therapy service. *Brazilian journal of physical therapy*, 17(4), PP 328-35.
3. Babakus, E. & Mangold, W. G. 1992. Adapting the SERVQUAL scale to hospital services: an empirical investigation. *Health services research*, 26(6), PP 767.
4. Behdioğlu, S., Acar, E. & Burhan, H. A. 2019. Evaluating service quality by fuzzy SERVQUAL: A case study in a physiotherapy and rehabilitation hospital. *Total Quality Management & Business Excellence*, 30(3-4), PP 301-19.
5. Berry, L. L., et al. 1994. Improving Service Quality in America: Lessons Learned [and Executive Commentary]. *The Academy of Management Executive (1993-2005)*, PP 32-52.
6. Burroughs, T. E., et al. 2004. Development and Validation of the Diabetes Quality of Life Brief Clinical Inventory. *Diabetes Spectrum*, 17(1), PP 41-9.
7. Carman, J. M. 2000. Patient perceptions of service quality: combining the dimensions. *Journal of services marketing*, 14(4), PP 337-52.
8. Cleary, P. D. & Mcneil, B. J. 1988. Patient satisfaction as an indicator of quality care. *Inquiry*, PP 25-36.
9. Davis-Sramek, B., et al. 2009. Creating commitment and loyalty behavior among retailers: what are the roles of service quality and satisfaction? *Journal of the Academy of Marketing Science*, 37(4), PP 440.
10. De Man, S., et al. 2002. Patients' and personnel's perceptions of service quality and patient satisfaction in nuclear medicine. *European Journal of nuclear medicine and molecular imaging*, 29(9), PP 1109-17.
11. Göb, R., Mccollin, C. & Ramalhoto, M. F. 2007. Ordinal methodology in the analysis of Likert scales. *Quality & Quantity*, 41(5), PP 601-26.
12. Goldstein, M. S., Elliott, S. D. & Guccione, A. A. 2000. The development of an instrument to measure satisfaction with physical therapy. *Physical therapy*, 80(9), PP 853-63.
13. Grover, S., Agrawal, V. & Khan, I. 2004. A digraph approach to TQM evaluation of an industry. *International Journal of Production Research*, 42(19), PP 4031-53.
14. Güllü, Ö., et al. 2017. Evaluation of expected and perceived of quality of service with the SERVQUAL scale: The case of a private physical therapy and rehabilitation center. *Biomedical Research*, 28(2).
15. Kammerlind, P., Dahlgaard, J. J. & Rutberg, H. 2004. Climate for improvement and the effects on performance in Swedish healthcare—a survey in the county council of Östergötland. *Total Quality Management & Business Excellence*, 15(7), PP 909-24.
16. Kim, Y.-K., et al. 2008. A study on medical services quality and its influence upon value of care and patient satisfaction—Focusing upon outpatients in a large-sized hospital. *Total Quality Management*, 19(11), PP 1155-71.
17. Lonial, S., et al. 2010. An evaluation of SERVQUAL and patient loyalty in an emerging country context. *Total Quality Management*, 21(8), PP 813-27.
18. Matei, A. & Săvulescu, C. 2011. CONVERGENCE OF POLICIES FOR PROMOTING TOTAL QUALITY MANAGEMENT IN THE PUBLIC ADMINISTRATIONS OF BALKAN STATES—

- EUROPEAN UNION MEMBER STATES. *European Administrative Space-Balkan realities*, PP 144.
19. McAlexander, J. H., Kaldenberg, D. O. & Koenig, H. F. 1994. Service quality measurement. *Journal of health care marketing*, 14(3), PP 34-40.
 20. Naik, C. K., Gantasala, S. B. & Prabhakar, G. V. 2010. Service quality (SERVQUAL) and its effect on customer satisfaction in retailing. *European journal of social sciences*, 16(2), PP 231-43.
 21. Oberst, M. T. 1984. Patients' perceptions of care: Measurement of quality and satisfaction. *Cancer*, 53(PP 2366-73).
 22. Pakdil, F. & Harwood, T. N. 2005. Patient satisfaction in a preoperative assessment clinic: an analysis using SERVQUAL dimensions. *Total Quality Management & Business Excellence*, 16(1), PP 15-30.
 23. Parasuraman, A., Berry, L. L. & Zeithaml, V. A. 1991. Refinement and reassessment of the SERVQUAL scale. *Journal of retailing*, 67(4), PP 420.
 24. Prajogo, D. I. & Cooper, B. K. 2010. The effect of people-related TQM practices on job satisfaction: a hierarchical model. *Production Planning and Control*, 21(1), PP 26-35.
 25. Psychogios, A. G. & Wilkinson, A. 2007. Exploring TQM awareness in the Greek national business context: between conservatism and reformism cultural determinants of TQM. *The International Journal of Human Resource Management*, 18(6), PP 1042-62.
 26. Sangüesa, M., Mateo, R. & Ilzarbe, L. 2007. How hospitals choose a quality management system: relevant criteria in large Spanish hospitals. *Total Quality Management*, 18(6), PP 613-30.
 27. Sinclair, S., et al. 2017. Sympathy, empathy, and compassion: A grounded theory study of palliative care patients' understandings, experiences, and preferences. *Palliative medicine*, 31(5), PP 437-47.
 28. Sofaer, S. & Firminger, K. 2005. Patient perceptions of the quality of health services. *Annual review of public health*, 26(
 29. Sureshchandar, G., Rajendran, C. & Anantharaman, R. 2002. The relationship between service quality and customer satisfaction—a factor specific approach. *Journal of services marketing*, 16(4), PP 363-79.
 30. Wu, W.-Y., Hsiao, S.-W. & Kuo, H.-P. 2004. Fuzzy set theory based decision model for determining market position and developing strategy for hospital service quality. *Total Quality Management & Business Excellence*, 15(4), PP 439-56.
 31. Yusuf, Y., Gunasekaran, A. & Dan, G. 2007. Implementation of TQM in China and organisation performance: an empirical investigation. *Total quality management*, 18(5), PP 509-30.