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(SYAD)

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ARAŞTIRMALARI DERGİSİ

<i>İçindekiler</i>	<i>Sayfa No.</i>
<i>Table of Contents</i>	<i>Page Num.</i>
1. Quality of Healthcare Services in Hospitals of Pakistan: From Patients' Perspective	
Hastalar Perspektifinden Pakistan Hastanelerinde Sağlık Hizmetlerinin Kalitesi	1-20
Aqsa SİDDİQ, Muhammad Farooq JAN, Khursheed IQBAL Farhan AHMED, Adil ADNAN.....	
2. Uluslararası Pazara Giriş Kararını Etkileyen Faktörler Üzerine Kavramsal Bir Çalışma	
A Conceptual Study On The Factors Affecting Foreign Market Entry Decision	21-46
Naci BÜYÜKDAĞ, Tuğba GÜRÇAYLILAR YENİDOĞAN	
3. Technological And Marketing Innovation For Explaining On Organizational Growth	
Organizasyonel Büyümenin Açıklanmasında Teknolojik Ve Pazarlama İnovasyonu	47-58
Muhammad Farooq JAN Zeeshan JAVED, Zohaib ALİ, Azmat Ali SHAH, Zeeshan HAİDER	
4. Abridge from Organizational Culture to Strategic Management in Public Organizations	
Kamu Kurumlarında Örgüt Kültüründen Stratejik Yönetime Köprü	59-88
Ali ALQADRE	
5. Kişilik Özelliklerinin Girişimcilik Niyetine Etkisi: Mersin Üniversitesi'nde Bir Araştırma	
The Role Of Entrepreneurial Personality Traits On Entrepreneurial Intention: A Research In Mersin University	89-123
Emre GENÇAY, Musa Said DÖVEN	

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**QUALITY OF HEALTHCARE SERVICES IN HOSPITALS OF
PAKISTAN: FROM THE PATIENTS' PERSPECTIVE**

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ABSTRACT

This study is a segment of the series of studies¹ conducted on the hospitals of Peshawar, Pakistan. The aim of the series of the study was an in-depth analysis of the prevailing quality of healthcare services in the hospitals and to contribute in filling up any existing gap and to suggest developments from the patients' perspective. This part of the study finds the differences in quality of healthcare services in the public and private sector hospitals of Peshawar from the patients' perspective. A sample of patients (n = 1200) having treatments from the tertiary level hospitals of Peshawar, Pakistan was selected on convenience based sampling. The data was analysed and presented using descriptive statistics, reliability analysis, correlation and independent samples t-test. The study concludes a negligible difference of quality offered by the two sectors hospitals in Peshawar. The findings suggest continuous improvements using participation of patients' feedback in managing strategically and developing the modern healthcare services with related facilities exclusively in public hospitals in Peshawar. Further, the value-added rewards and facilities to healthcare workforce can help to improve their responsiveness and empathetic attitudes towards patients. Cost and leadership interventions are recommended to be included as an isolated dimension of the SERVQUAL instrument to measure the cost-effective quality of healthcare services in the hospitals having an international standard strategic leadership framework. A similar study is recommended in other cities of Pakistan to develop a homogenous healthcare system at national level and to enjoy a competitive edge in the global industry.

Key Words: *Quality, SERVQUAL, Competitiveness, Healthcare Services*

¹ From PhD Thesis in Management Science

Note: Paper was presented at ICCIBE 2018, Tokat, Turkey

HASTALAR PERSPEKTİFİNDEN PAKİSTAN HASTANELERİNDE SAĞLIK HİZMETLERİNİN KALİTESİ

ÖZET

Bu çalışma Pakistan'ın Peşaver'deki hastanelerinde yapılan bir seri çalışmanın bir kesimidir. Bu çalışma serisinin amacı, hastanelerde mevcut sağlık hizmetlerinin kalitesinin derinlemesine bir analizi ve mevcut boşlukların doldurulmasına katkıda bulunmak ve hastalar açısından gelişmeler önermek olmuştur. Çalışmanın bu bölümü, Peshawar'ın kamu ve özel sektör hastanelerindeki sağlık hizmetlerinin kalitesindeki farklılıkları hastaların bakış açısıyla bulmaktadır. Peshawar'ın üçüncü düzey hastanelerinde tedavi görmekte bir hasta kütləsi (n = 1200) uygunluk temelli örnekleme ile seçildi. Veriler analiz ve tanımlayıcı istatistikler, güvenilirlik analizi, korelasyon ve bağımsız örneklem t-testi kullanılarak sunuldu. Çalışma, Peşaver'deki her iki sektör hastanelerinin sunduğu hizmet kalitesi arasında çok bir fark olmadığını farkına varıyor. Bu bulgular, hastaların Peshawar'taki devlet hastanelerinde, stratejik olarak yönetme ve ilgili sağlık tesisleriyle modern sağlık hizmetlerini geliştirme konusundaki geri bildirimlerinin katılımını kullanarak sürekli iyileştirmeler olduğunu göstermektedir. Ayrıca, sağlık çalışanlarının katma değerli ödülleri ve tesisleri, hastalara karşı duyarlılıklarını ve empatik tutumlarını geliştirmeye yardımcı olabilir. Maliyet ve liderlik müdahalelerinin uluslararası standart bir stratejik liderlik çerçevesine sahip hastanelerde sağlık hizmetlerinin maliyet etkin kalitesini ölçmek için SERVQUAL cihazının izole bir boyutu olarak dahil edilmesi önerilmektedir. Pakistan'ın diğer şehirlerinde de ulusal düzeyde homojen bir sağlık sistemi geliştirmek ve küresel endüstride rekabet avantajını yaşamak için benzer bir çalışma önerilmektedir.

Anahtar Kelimeler: Kalite, SERVQUAL, Rekabetçilik, Sağlık Hizmetleri

Introduction

The last few decades of globalization had a tremendous impact on the services sector, especially in education and healthcare systems. Healthcare sector has become a highly competitive and rapidly growing service industry around the world. Health systems are normally appraised in terms of their ability to deliver accessible, safe, high quality, efficient, and equitable care for the sake of population health and longevity (WHO, 2007; UNDP, 1990, HDI report, 2013). In today's time, service quality in the health sector is facing a lot of problems due to lack of strategic awareness regarding strategic planning, management and related internal strategic policies (Speziale, 2015).

The primary element of the system is providing personal health care services to individuals in hospitals. The biggest challenge faced by healthcare markets is the requirement of extensive strategic management interventions to define and measure service quality

aligned with strategic vision and mission statement. The recognition of service quality and its implementation lead organizations to increase organizational performance, customer satisfaction and loyalty (Cronin et al., 2000; Kang & James, 2004; Ladhari, 2008; Yoon & Suh, 2004). Customer satisfaction is reliant on the service providers' competence to meet the expectations of availing continuously better services. Developing a system where a patient is considered as a customer is the leading component of quality and strategic management and the degree of patient satisfaction is the foremost determinant of quality healthcare services (Yoon & Suh, 2004; Kang & James, 2004). Patient satisfaction is the nutshell of patients' expectations, perception and experiences (Chen, & Hu, 2010; Siddiqi, 2011; Dabholkar, 2015). Enhancing the patients' satisfaction through effective diagnoses and treatment to achieve competitiveness in the national as well as global industry is the major challenge to the healthcare strategic leadership of this era (Ginter, Duncan & Swayne, 2018).

SYAD**2019/1**

In Pakistan, the population specifically in urban areas are deprived of fundamental rights including healthcare facilities because majority of the public and private hospitals are located in big cities (Irfan & Ijaz, 2011). A robust healthcare system in Pakistan must be a dream of every citizen and it is vital to assess the performance of existing system in order to design and maintain a zero-defect healthcare system in Pakistan. There is a tremendous need of setting yardsticks for quality of healthcare services in hospitals of Pakistan that can be boosted up. The competitiveness of healthcare services can be enhanced if strategic leaders succeed in improving quality dimensions following the strategic leadership practices within standardized framework (Siddiq, & Baloch, 2016; Siddiq & Zaman, 2016). Therefore, the study aims to investigate the performance of public and private sector hospitals of Peshawar in delivery of service quality. The differences are measured based on the determinants of healthcare functional quality using SERVQUAL (Parasuraman et al., 1985, 1988) instrument based on six dimensions

as tangibles (infrastructure), responsiveness, process of healthcare, administrative procedures, safety and trustworthiness and empathy in hospitals of Peshawar.

1. Review of Literature

The recognition of service quality and its implementation lead organizations to increase strategic management, planning, organizing, organizational performance, customer satisfaction and loyalty (Cronin et al., 2000; Yoon & Suh, 2004; Kang & James, 2004). Patient's perception is the major indicator to evaluate the service quality of a healthcare organization (Connor et al., 1994) and quality of services delivered to the customers should meet their perceptions (Parasuraman et al., 1985, 1988; Reidenbach & Sandifer-Smallwood, 1990; Babakus & Mangold, 1992). Patient's perception is the major indicator to evaluate the service quality of a healthcare organization (Cronin & Taylor, 1992; Connor et al., 1994) and quality of services delivered to the customers should meet their perceptions (Parasuraman et al., 1985, 1988; Reidenbach & Sandifer-Smallwood, 1990; Babakus & Mangold, 1992; Zeithaml et al., 1993). Service quality and customer satisfaction have vital role and considered as two sides of the same coin (Gilbert et al., 1992) and is achieved with proper strategic planning (Lasserre, 2017). Service quality is the ability of an organization to recognise the needs and expectations of consumers (Pitt, & Jeantrout, 1994; Siddiq, & Baloch, 2016). Total quality management and continuous improvement strategies help service organizations to attain competitive edge even quicker than manufacturing firms due to having inseparability attribute of service (Porter, 2010). Healthcare is defined as a multitude of services rendered to individual, families or communities by health service professionals for promoting, maintaining, monitoring or restoring health (Last, 1993; Azam et al., 2012).

Today strategic improvement and investing in healthcare services is one of the objectives of almost every healthcare organization of nations. In

such a highly competitive healthcare environment, public or private hospitals are focusing on service quality in terms of financial (costs, revenues, profitability) and non-financial performance (quality of their services), to gain strategic competitiveness (Donaldson, Skelcher, & Wallace, 2008). Health service quality is a sum of technical and functional quality (Yousapronpaiboon & Johnson, 2013), difficult to measure having characteristics such as complex nature, strategic management policy, intangibility, heterogeneity, participants with different interests in the healthcare delivery and ethical considerations (Ladhari, 2009; McLaughlin & Kaluzny, 2006; Naveh & Stern, 2005; Eiriz & Figueiredo, 2005; Rohlin et al., 2002; Craig et al., 2007). According to Lebov et al., (2003) the healthcare service quality is doing the right things and making continuous strategic improvements to get the best possible clinical outcome, satisfied customers, retention of talented staff and maintaining a superior financial position through best management decisions. Porter and Teisberg, (2006) claimed the healthcare system as a highly patient involvement service as they are found more involved in strategic decision making. Rohini and Mahadevappa (2006) revealed an overall gap between the patients' perceptions and expectations. A robust health system provides the right services, both personal and population-based, in the right places, at the right times to all of those who are in need of those services, from both public health and personal health perspectives, included all preventive, promotable, remedial, rehabilitative and palliative services (WHO, 2010). Hasin et al., (2001) and Baldwin & Sohal (2003) studied general attitude and behavior of employees, communication, responsiveness, courtesy, cost and cleanliness in hospitals as dimensions of service quality. Quality of healthcare services depends on communication, tangibles, empathy of nursing staff, assurance, the responsiveness of administrative staff, security and physician responsiveness (Mosadeghrad, 2013). Patients perceive satisfaction from the availed services in terms of physician care, nursing care, staff compassion to

SYAD**2019/1**

attendants, admission and discharge process and pleasantness of surroundings (Otani & Kurz, 2004). Pakdil and Harwood (2005) highlighted interior condition of waiting rooms as value added services to patients and attendants. Medicine availability, medical information, staff behavior, doctor behavior, management decisions, planning and clinic infrastructure including security in all respects are also proved as vital elements of functional quality to patients (Rao et al., 2006; Duggirala et al., 2008; Pakdil & Harwood, 2005; Ramsaran-Fowdar, 2008; Murti, Deshpande & Srivastava, 2013; Padma, Rajendran, & Sai Lokachari, 2010). Baalbaki et al. (2008) and Ramsaran-Fowdar (2008) revealed that nursing with reliable, fair and impartial treatment contribute high in all patients' satisfaction level. Padma et al., (2009) studied and concluded that hospital infrastructure, personnel quality, the process of clinical care, administrative procedures, safety indicators, hospital image, social responsibility, and trustworthiness of the hospital are key indicators to the quality of the services provided to seek a high degree of patients' satisfaction. SERVQUAL model for hospitals can determine the quality gaps in various dimensions and to craft reforming strategies based on the investigations (Alrubaiee & Alkaa'ida, 2011; Wicks & Chin, 2008; Bakar et al., 2008a; Mostafa, 2005; Hu, Lee & Yen, 2010). Every dimension in the SERVQUAL is a guideline for continuous improvement across a range of services to lead global competitiveness of an organization. The research studies measuring service quality of healthcare have used SURVQUAL in the context of hospitals mostly focused on patient's and management's perspective (Duggirala et al., 2008). The SERVQUAL measurements (Parasuraman et al., 1985, 1988, 1991) are proposed and applied for the measurement of hospital service quality required for policy makers and found differences in the private and public sector hospitals (Wicks & Chin, 2008; Bakar et al., 2008a; Mostafa, 2005; Hu, Lee & Yen , 2010; Witkowski & Wolfenbarger, 2002). Based on the review of the literature following hypotheses:

- H1: Patients perceived healthcare quality dimensions (tangibles, responsiveness, the process of healthcare, administrative procedures, safety and trustworthiness and empathy) have a difference in public and private hospitals of Peshawar.
- H2: Overall perceived quality GAP of public sector hospitals and private sector hospitals in Peshawar has a difference.

The six dimensions of SERVQUAL including tangibles (infrastructure), responsiveness, the process of healthcare, administrative procedures, safety and trustworthiness and empathy used to measure the quality of hospital services in Peshawar, Pakistan as in Table 1.

Table 1. *Modified SERVQUAL for Hospitals in Peshawar*

Domains of Modified SERVQUAL	Items No
i. Tangibles (Infrastructure)	9
ii. Responsiveness	8
iii. Process of healthcare	7
iv. Administrative procedures	7
v. Safety measures & Trustworthiness	7
vi. Empathy	6

Source: Author constructed (Adopted: SERVQUAL of Parasuraman et al. 1985, 1987)

In the same series of study, the scale is investigated previously for the expectation (22-items) and perception (22-items) levels of patients in order to calculate the gaps in the received quality of services (Siddiq, & Zaman, 2016; Baloch, & Siddiq, 2016).

2. Research Methodology

This positivist study is a combination of applied, descriptive and correlational in nature focusing on quantitative data to compare two sectors of healthcare services providers that are public sector and private sector. The population of the study confined to the respondents from public and private sector teaching hospitals located in Peshawar District, Khyber Pakhtunkhwa, Pakistan. The sample of the study consists of a sample conveniently selected 1200 patients from the selected hospital (Siddiq, 2016), both male female, ranging in age groups as 1=18-25 years, 2=26-33 years, 3=34-41 years, 4=42-49 years and 5= 50+ years. Primary data is collected from the patients of the public and private hospitals in Peshawar. The review of literature

helped to modify the SERVQUAL instrument for the study align with the hospitals of Peshawar Pakistan. The gap (Siddiq, 2016) is calculated along five quality dimensions related to the study comprise of tangibles, responsiveness, process of healthcare, administrative procedures, safety and trustworthiness and empathy as shown in table 2. Descriptive statistics are used for analysis of the demographic variables. Correlation and comparing means using independent samples t-Test are used to calculate the statistically significant difference (Sig., $p < .05$) of quality GAP between the public and private sector hospitals in Peshawar (Siddiq, 2016). Analysis of data is conducted using SPSS including Cronbach's alpha reliability of all the instruments.

Table 2. Details of the Variables used in the Instrument

Concept	Model Used	Dimensions	No of Items	Type of Scale
To study the Quality Services up to Patients' satisfaction level	Modified SERVQUAL for Hospitals	i. Tangibles (Infrastructure) ii. Responsiveness iii. Process of Healthcare iv. Admin; Procedures v. Safety and Trustworthiness vi. Empathy	44	Rating Scale from Worst condition to Best Condition (1-5)

Source: Author Constructed

3. Results and Interpretations

3.1. Descriptive Analysis

A total sample of (n=1200) patients consists of 61% males and 39% females (as shown in Table 3) is selected using Convenient sampling technique. The selected patients were ranging in age groups as 1=18-25 years, 2=26-33 years, 3=34-41 years, 4=42-49 years and 5= 50+ years.

Table 3. Gender of the Patients (n=1200)

Gender	Frequency	Percentage
Male	732	61%
Female	468	39%
Total	1200	100%

The selected patients consist of both out-ward and in-ward patients in Public (44%) and Private (56%) Teaching Hospital of Peshawar (as in Table 4).

Table 4. Demographics of the Respondents (Sector wise) (n=1200)

Sector	Frequency	Percentage
Public Sector Hospital	528	44.%
Private Sector Hospital	672	56%
Total	1200	100%

A total of 1200 patients are selected included 230 from Khyber Teaching Hospital, 179 from Lady Reading Hospital, 143 from Hayatabad Medical Complex, 150 from Rehman Medical Institute(RMI), 32 from North West Hospital, 234 from Kuwait Teaching Hospital, 126 from Mercy Teaching Hospital and 106 patients from Naseer Teaching Hospital.

3.2. Reliability Analysis

The modified SERVQUAL for the service quality measurement of hospitals in Peshawar has overall 89% internal consistency (the Cronbach alpha coefficient is 0.891) among its 44 items as seen in Table 5.

SYAD
2019/1

Table 5. Reliability Coefficient for the Variables of the Modified SERVQUAL

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items	Sample size
0.883	0.891	44	1200

Further, Table 6 shows that Cronbach's Alpha for all items are significantly reliable to be included in the analysis as none of the items have alpha value less than 0.7.

Table 6. Reliability of Sub-Scales of Modified SERVQUAL

Dimensions	Cronbach's Alpha	No. of Items
Tangible (Infrastructure)	0.85	9
Responsiveness	0.87	8
Process of Healthcare	0.93	7
Administrative Procedures	0.90	6
Safety and Trustworthiness	0.86	7
Empathy	0.89	6

3.3. Correlational Analysis

A simple bivariate correlation analysis provides Pearson correlation coefficients² “r” between pair of variables determining the direction of the relationship. Table 7, explains the correlation analysis of variables in modified SERVQUAL for the hospitals used in this study.

From the value of Pearson correlation coefficient of all the variables in the instrument, it is indicated that none of the variable has a weak or low relationship among each other.

Table 7. *Correlation Coefficient for Dimensions of Quality in the Modified SERVQUAL (n=1200)*

	T	R	H	A	ST	E
Tangible (T)	1					
Responsiveness(R)	0.573**	1				
Healthcare Process (H)	0.620**	0.525**	1			
Admin; Process (A)	0.670**	0.719**	0.550**	1		
Safety & Trust (ST)	0.759**	0.501**	0.592**	0.661**	1	
Empathy (E)	0.586**	0.468**	0.494**	0.580**	0.622**	1

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

This result helps to understand the value of all included variables in the modified SERVQUAL instruments to study the quality of healthcare services in the public and private sector hospitals of Peshawar. Further, it is found that safety & trustworthiness have the highest correlation with tangibles ($r = 0.759$) followed by the relationship of admin procedures with responsiveness ($r = 0.719$) and with tangibles ($r = 0.690$) similar to previous parts of the study (Siddiq, 2016).

² Cohen (1988) suggests the following guidelines for interpreting the value of “r” as when $r = 0.10$ to 0.29 and $r = -0.10$ to -0.29 (small); $r = 0.30$ to 0.49 and $r = -0.30$ to -0.49 (medium); $r = 0.50$ to 1.0 and $r = -0.50$ to -1.0 (large).

3.4. T-test to Compare the Public and Private Sector Hospitals

The gaps for both the public and private sector hospitals were calculated in the previous part of the study along with five quality dimensions: tangibles, responsiveness, process of healthcare, administrative procedures, safety and trustworthiness and empathy (Siddiq, 2015). To assess a service quality, the gap for each question of the instrument is calculated based on comparing the perception score with the expectation score.

Table 8. Interpretation of t-test for the SERVQUAL Gap (Independent Sample t-test)

Interpretation of the Independent samples t-test for Comparison of Public and Private Hospitals based on Quality GAP					
	Sector	N	Descriptive Statistics		T-test results Comparing Public & Private Sector Hospitals
			M	SD	
Tangibles	Public Hospital	528	1.6964	0.67	Equal variances not assumed $t(1262.517) = 3.336, P = .001$ significant Difference; Private Sector is better than Public Sector
	Private Hospital	672	1.4517	0.58	
Responsiveness	Public Hospital	528	0.7099	0.72	Equal variances not assumed $t(1250.095) = -1.618, P = 0.106$ No Significant Difference
	Private Hospital	672	0.7810	0.84	
Healthcare Process	Public Hospital	528	1.4564	0.70	Equal variances assumed $t(1263) = -4.131, P = 0.000$ significant Difference; Public Sector is better than Private Sector
	Private Hospital	672	1.6221	0.71	
Admin Procedures	Public Hospital	528	1.2361	0.75	Equal variances not assumed $t(1232.89) = 1.214, P = 0.225$ No Significant Difference
	Private Hospital	672	1.1819	0.83	
Safety & Trustworthiness	Public Hospital	528	0.6906	0.73	Equal variances not assumed $t(1251.261) = 2.624, P = 0.009$ significant Difference; Private Sector is higher than Public sector
	Private Hospital	672	0.5728	0.86	
Empathy	Public Hospital	528	0.9167	0.78	Equal variances not assumed $t(1080.479) = 5.208, P = 0.000$ significant Difference; Private Sector is better than Public sector
	Private Hospital	672	0.7003	0.67	

SYAD

2019/1

Table 8 depicts that the t-value $(1262.517) = 3.336, p = 0.001 < 0.05$, the null hypothesis of “no difference” is rejected and concluded that there is a significant difference in the “tangibles” scores of public and

private sector hospitals. The ‘tangibles’ quality of private sector hospitals (M=1.49) with less gap than the public is significantly better than public sector hospitals (M=1.65). The results from the table 8 also explain that there is no significant difference in “responsiveness” ability of public sector hospitals and of private sector hospitals with t-value (1250.095) = -1.618, P=0.106 >0.05. Hence both sector hospitals are almost equally responsive to their patients. The findings are shown in Table 8 also describe that there is a significant difference in “healthcare process” quality of public sector hospitals and of private sector hospitals with t-value (1263) = -4.131, P=0 .000<0.05.

Hence the results suggest that “healthcare process” quality of private sector hospitals (M=1.62) has greater GAP than public sector hospitals (M=1.46), so public hospitals have better healthcare process than the private sector. The results also show that there is no significant difference in “administrative procedures” quality of public sector hospitals (M=1.24, SD=0.75) and “administrative procedures” quality of private sector hospitals (M=1.18, SD=0.83); t (1232.89) = 1.214, P=0.225. As the p-value= 0.225 is greater than $\alpha=0.05$, the null hypothesis of “no difference” is accepted and concluded that there is no significant difference in the “administrative procedures” scores of public and private sector hospitals. Hence the results suggest that “administrative procedures” quality of public sector hospitals (M=1.24, SD=0.75) is not significantly different from private sector hospitals (M=1.18, SD=0.83). Moreover, there is a significant difference in “safety and trustworthiness” of public sector hospitals (M=0.69, SD=0.73) and “safety and trustworthiness” of private sector hospitals (M=0.57, SD=0.86); t (1251.261) = 2.624, P=0.009 is less than $\alpha=0.05$. Hence the results suggest that “safety and trustworthiness” at private sector hospitals (M=0.57, SD=0.86) is perceived significantly more than at public sector hospitals (M=0.69, SD=0.73). For the empathy dimension, t (1080.479) = 5.208, P=0.000 is less than $\alpha=0.05$, showing a significant difference in the empathic behaviour of

the workforce in public and private sector hospitals. It is, therefore, concluded that the patients' perceived quality of 'tangibles' in private sector hospitals is more than public hospitals while the quality of 'healthcare process' is perceived as better in public sector hospitals than private sector hospitals. 'responsiveness' and 'administration procedures' of both the sector hospitals have no significant difference means nearly similar quality of both dimensions is perceived by the patients in the public and private hospitals in Peshawar. While the degree of 'safety & trustworthiness' and 'empathy' is perceived higher by the patients in private hospitals in Peshawar compared with public sector hospitals.

3.5. Comparing Overall Quality GAP Difference between the Public and Private Sector Hospitals

To assess service quality overall GAP using SERVQUAL, the sum of GAP of all domains is calculated and compared using independent sample t-test. As shown in Table 9, there is no significant difference in "overall quality GAP of all domains" between public sector hospitals (M=6.51) and private sector hospitals (M=6.21); $t(1263) = 1.385, P=0.166$.

SYAD

2019/1

Table 9. Interpretation of t-test for the Overall Quality GAP between Public and Private Hospitals

Interpretation of the Independent samples t-test for Comparison of Public and Private Hospitals based on Overall Quality GAP					
	Sector	N	Descriptive Statistics		T-test results Comparing Public & Private Sector Hospitals
			M	SD	
Overall Quality GAP of all Domains	Public Hospital	528	6.51	3.33	Equal variances assumed $t(1263) = 1.385, P=0.166$ No significant Difference
	Private Hospital	672	6.21	4.08	

As the p-value= 0.166 is greater than $\alpha=0.05$, concludes that there is an insignificant difference in the "overall quality GAP of all domains" scores of public and private sector hospitals. Hence the results suggest that the quality GAP calculated using SERVQUAL domains has no statistically significant difference between public sector hospitals (M=6.51) and private sector hospitals (M=6.21). Although individual

dimensions like tangibles, healthcare process, empathy, safety & trustworthiness have differences in public and private hospitals overall quality GAP of all dimensions is statistically insignificant. So both the sector hospitals are nearly providing a similar degree of healthcare service quality.

Table 10. Summarizing the comparative position of public and private hospitals in Peshawar. Out of six dimensions, private hospitals in Peshawar are performing better than public hospitals based on patients' perceived quality of healthcare services. The overall average gap of all dimensions of quality for public hospitals is 5.87 which is greater than the overall average gap of private hospitals 4.88. The results show a comparatively better performance of private sector hospitals.

Table 10. Comparison Average GAP Scores between Public and Private Hospitals in Peshawar

Comparison of Dimensions of SERVQUAL between Private and Public Hospitals							
Hospitals	Tangibles (Physical) Aspects	Responsiveness	Process of Healthcare	Admin; Procedures	Safety & trustworthiness	Empathy	Total of Mean Scores
GAP scores of Public Hospitals	1.04	0.85	0.99	1.11	0.80	1.08	5.87
GAP scores of Private Hospitals	0.93	0.60	1.01	0.83	0.73	0.78	4.88
Gap score Comparison	0.11	0.25	-0.02	0.28	0.07	0.3	0.99
Better Performance (with lesser gap)	Private Hospitals	Private Hospitals	Public Hospitals	Private Hospitals	Private Hospitals	Private Hospitals	Private

3.6. Conclusion And Implication Of The Study

Healthcare organizations and hospitals in today's era are operating in a highly competitive environment with the increased pressure towards quality improvement, best strategic decisions, related strategic policies and reduced costs. Responding to this situation transformation, the organizations need the will for delivery organizing around patients needs.

This study is a segment of the series of studies conducted on the hospitals of Peshawar, Pakistan with the aim to find the differences in quality healthcare services in the public and private sector teaching hospitals of Peshawar from the patients' perspective using a renowned instrument SERVQUAL. The results of the study empirically proved the significance of all variables in the modified SERVQUAL instruments to determine the quality of healthcare services in the public and private sector hospitals of Peshawar. The results support the contribution of various researches including Padma et al.(2009), Al-Hawary (2012) ; Celik & Sehribanoglu (2012) ; Zarei et al. (2012) ; Ariffin & Aziz (2008); Butt & de Run (2010); Leebov et al., (2003) in describing vital dimensions to measure quality of healthcare services in hospitals. The results showed a comparatively better performance of private sector hospitals and supporting the work of (Mostafa, 2005; Andaleeb, 1998) while contrast to the findings of Shabbir et al. (2010) who found better performing public hospitals with better healthcare facilities than private hospitals in Islamabad city of Pakistan. If the private sector is doing a bit good but not everyone can afford the cost, whereas patients have not access to cost-effective value of services in public hospitals.

In Pakistan, most of its population is living in rural areas and a small proportion is living in urban areas (Chaudhry, Malik, & Ashraf, 2006). The population in the rural area especially and the populations in an urban area to some extent are deprived of fundamental rights; especially healthcare facilities as the majority of the public and private hospitals are located in big cities (Irfan & Ijaz, 2011). Due to the growing importance of service quality especially in the healthcare sector of Pakistan, this study can be used to work on the prevailing gaps in the quality of healthcare services delivered by the public and private hospitals to gain patient satisfaction in Pakistan. However, SERVQUAL measures functional quality only means the method in which the health care services were delivered to the patient and not the technical quality including accurate diagnoses and procedures. Whereas the success and

SYAD**2019/1**

strategic competitiveness of a health care organization depends on both types of quality (Andaleeb, 1998; Yousapronpaiboon & Johnson, 2013). The results of the series of study can make a significant contribution to the healthcare industry not only at the tertiary level but also at primary and secondary level healthcare organizations. A national level strategic benchmark with international healthcare standards and organizations as well as an internal collaborative strategy on patient-centered tasks are the priority recommendations of this series study. Further, a robust healthcare system in Pakistan is suggested that must include respect of merit, no to corruption, accountability and reward, work-life balance of healthcare workforce and empathetic care from service providers at all managerial levels. Keeping in view the economic position of the majority population of Pakistan and particularly the province, it is needed to provide affordable services to patients. So that the cost factor may be included as an important dimension of the SERVQUAL instrument to measure the cost-effective quality healthcare services. The study strongly recommends that the healthcare system needs to incorporate an exhaustive and all-inclusive system of leadership and strategic management, thoroughly interpreted and understood by the workforce, along with imparting the necessary skills of strategic planning and behaviours, to drive and improve the essential services. This requires a collaborative effort and mutual cooperation across health systems to develop innovative models of care and to further enhance the strategic skills of the incumbent personnel. The subject of study in practice provides necessary direction for future prospects that would serve to further elaborate the interventions of strategic leadership as a focal dimension of quality and strategic management in hospitals.

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SYAD**2019/1**

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