

Service Quality about Health Sector of UK and Pakistan: A Comparative Study

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Abstract

The aim of this study is to determine mean comparison and identify similarities for all five dimensions of service quality between public hospitals in London city, UK and private hospitals in Attock city of Pakistan on the basis of patient's perception. Data was collected from patients through self-administered questionnaire. SERVQUAL was measurement scale, comprises of 21 items covering all five dimensions. Independence T-Test was performed to analyze collected data using Statistical software package for social sciences. Response rate in this study is 83.33%. It is concluded that in both sectors, performance of hospitals is lowest in responsiveness dimension of service quality. There is highest level of assurance among public hospitals of United Kingdom but in Pakistani private hospitals, empathy dimension is on higher side as compared to other four dimensions. Overall service quality in public hospitals of UK is better than those in private hospitals of Pakistan.

Keywords: Service Quality, HealthCare Units, Developing and Developed Country, Patient's perception.

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Introduction

There is competitive environment among different sector of world economy because of global competition, customer demands and high expectations of superior quality of

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products or services. Organizations gain strategic advantage through quality to gain success and sustain in market.

Service sector constitutes a major part of world economy. Service sector is rapidly increasing and health care units have significant share in it. Competition in health sector has increased pressure to provide services with high quality. The analysis of service quality enables hospital management to allocating the financial resources for improving performance in the areas that have more influential on the customers' perception of service quality. This study aims to compare different dimension of service quality provided in private hospitals of Pakistan and public hospitals of UK from the patient's perspective.

All most all hospitals in a city have same facilities/equipment/infrastructure. Service quality is a major factor that drives decision of patients to prefer a particular hospital. Hospitals offer same variety of services but their quality may differ. Services may look alike but experience will not be similar. It is not an easy task to measure whether a hospital meets expected level of service quality or not. In hospitals, service quality consists of technical quality and functional quality. Technical quality is 'what patients get'. It is level of accuracy of diagnoses and procedures. Functional quality is 'how they get it'. It is the manner in which the services are delivered. Healthcare professionals have knowledge about technical quality. Patients do not have enough understanding about technical quality. Patients only observe the level of functional quality. There are evidences that functional quality is the significant variable that has major impact over customer's perception about service quality.

Service quality is main determinants of customer satisfaction. It is necessary to measure service quality so that management can assess level of service quality and identify gap for improvements. Product differentiation is impossible in competitive environment. Management can differentiate their organization from other competitors only on the basis of service quality. Various factors of service quality have significant impact in order to attract and maintain customers. With increasing number of hospitals in city, staff is required to provide services with deep care. Continuous improvement in service quality is mandatory. Level of service quality always changes with the time. Management need to adopt strategies for satisfying customers in order to survive in today competitive market. Asian countries are full of collectivist. Thus, Word of Mouth (WOM) has significance impact in marketing. Customers who are satisfied tell others about their experiences and WOM Advertising increases.

Being tangibles and heterogeneous, products can be measured. Being intangibles, heterogeneous and inseparable, it is difficult to measure services. When there is nothing to measure, then how can service quality be assessed and measured. In service sector, consumer's perception presents level of service quality. The consumer's judgment on overall excellence of a service is the perceived quality. Perceived service quality is the degree of variations between consumers' perceptions and expectations. Quality ought to be seen as manifested and felt as expected.

Healthcare units face difficulty in measuring service quality. SERVQUAL is considered comprehensive scale to estimate service quality level in hospital environment.

Patient perception is major indicator about service quality in healthcare units. It is satisfaction level because of which, patients prefer to a particular hospital.

Literature Review

Service Quality-Concept

A person or a group who is direct beneficiary of a product, or service or a project is known as customer. When expectations of a customer are met or exceeded over time from a company, he/she is satisfied. Satisfied customer has loyalty and positive WOM to his organization (Appannan, Doraisamy, & Hui, 2013; Cacioppo, 2000).

A process, in which a series of intangible activities are performed between customer and employees of organization or tangible goods or system of organization which are provided as solution, is known as service. Service quality is a global judgment or attitude toward a particular service. Customer's overall impression about an organization and its service is known as service quality (Grönroos, 2000; Ismail, Yusof, & Ikhsan, 2000).

Any Service consists of intangibility, inseparability, variability and Perishability (Mudie & Pirrie, 2006)

- Intangibility

Intangibility is major characteristic of service. Service cannot be counted, tested, verified and inventoried before sale. Organizations find it very difficult how customer assess their services and evaluate quality of their services.

- Inseparability (or simultaneous production and consumption)

There is marked difference between physical goods and services in terms of processing from production to consumption.

Physical good moves from production to storage, storage to sold and finally from sold to consumption. Services once are sold, produced and consumed simultaneously.

- Variability (or heterogeneity)

There is variability in consequences because of production and consumption of services at same time. Quality of services is dependent upon service provider, time and how it is provided.

- Perishability

Services do not have characteristic of perishability. Services are not stored for later use or sales. If demand of services exceeds supply, then it cannot be met. Similarly, if capacity of services exceeds demand of services then revenue and/or value of those services is lost.

In today world of business, service quality gives competitive edge to organizations over its competitors. On the basis of service quality, an organization can make difference from other organizations. Organizations gain competitive advantage through service quality.

Dimensions of Service Quality

There are evidences about varying dimensions of service quality relevant to customer satisfaction. There are eleven dimensions of service quality- reliability, responsiveness, competence, access, courtesy, communication, credibility, security, competence, understanding the customer and tangibles. Research study also concludes that service quality constitutes of five dimensions (Berry, Zeithaml, & Parasuraman, 1985; Parasuraman, Zeithaml, & Berry, 1985; Zeithaml, Bitner, & Gremler, 1996).

1. Tangibles

Tangible dimension covers appearance of equipment, staff, stationary and facilities.

2. Reliability

It is about how services are performed with accuracy and incoordination.

3. Responsiveness

This dimension measure attitude and behavior of staff, promptly provision of services.

4. Assurance

Assurance dimensions reveals fact about knowledge and courtesy level of employees and their ability to inspire and provide confidence into patients.

5. Empathy

Care and attention provided to patients by hospital's personnel is assessed through empathy dimension.

Research evidences from different studies show different results about ranking of dimensions of service quality. There is evidence about tangibles and empathy being most significant dimensions of service quality in United Arab Emirates. Reliability being most important and tangible being least important are considered in people of Iran and Qatar (Abdullah & Kassim, 2009; Al-Tamimi & Al-Amiri, 2003; Golmohammadi & Jahandideh, 2010; Hossain & Leo, 2009).

Service Quality in Health Sector

With increasing competition in health sector, service quality and patients satisfaction has got considerable attention in research. Service quality has direct impact over the profitability and reputation of a health care unit. Service quality is directly related to the

word of mouth and play role in decision about selection of a particular health unit (Andaleeb, 2001; Donabedian, 1980; Williams & Calnan, 1991).

To cover expectations of patients from every angle, it is imperative to determine key factors of service quality that are supposed significant in increasing satisfaction level. Determinants of service quality make it easy to handle patient complaint. Ultimately it reduces time and money of health care unit. A scale developed by Parasuraman et al. (1985) known as SERVQUAL comprises of 22-items is considered valid and reliable to measure five dimensions of service quality in Health sector (Pakdil & Harwood, 2005; Parasuraman et al., 1985; Wong, 2002).

Service Quality and Hospitals in Pakistan

Islamic republic of Pakistan is a welfare country and it is prime responsibilities of government to provide basic necessities of life including; food, shelter, clothing, health and education. Pakistani government has comprehensive system for providing health services to its people. Health care delivery system in Pakistan is hybrid. It is mixture of public, private and informal health care sector. People choose one of these modes based on their purchasing power, satisfaction level and will (Nishtar, 2009; Sabih et al., 2010).

Research evidence shows that 80% of population use private and/or informal health facilities. 52% of this group utilizes services of private hospitals. It is very strange to know that 50% of populations do not like services provided by government hospitals in Pakistan. (Demographic, 2013)

People prefer to utilize private health care facilities based on numerous reasons. These reasons are absence of staff from duties, lack of professional staff supply of vital medicine, lack of commitment among staff. Other factors like poor planning, minimum budget allocation, poor infrastructure and political reasons play their role in bad performance of government hospitals. 0.55% of GDP is allocated to the health sector in Pakistan (Ahmed & Shaikh, 2008; Mushtaq, Gull, Shad, & Akram, 2011).

Patients are less satisfied from services of government hospitals so there is reduction in usage of their services. This dissatisfaction level is found among people of all income level. Now, due to neck-on-neck competition in health sector, hospitals management show concern over quality services and its determinants in their jurisdiction (Shaikh, Mobeen, Azam, & Rabbani, 2008).

Service Quality and Hospitals in UK

Healthcare is a decentralized department in UK. England, Northern Ireland, Wales and Scotland each have their own system of healthcare, sponsored by and accountable to their separate governments. Because of different priorities and policies, there is difference between their systems. Besides these differences, performance of NHS is measured to make international comparison.

Healthcare system of the United Kingdom was graded as best system in the world of developed countries overall and in segments of Quality of Care, Efficiency, Equity and Access to care. In 2015 annual report of Euro Health Consumer Index, UK was criticized

for its poor access to care and autocratic management. Ranking of UK is 14th out of 35 countries in this report. However this Health Index has been itself criticized by academic researchers. Total expenditure of UK Government on healthcare sector is 8.55 of its GDP in 2013 which is substantially less than that of USA (16.4%), Switzerland (11.1%), Netherlands (11.1%), Germany (11.0%) and France (10.9%)(Araja & Kólves; Karen Davis, Stremikis, Schoen, & Squires, 2015; K Davis, Stremikis, Squires, & Schoen, 2014; Oliver, 2016).

NHS system employs General Practitioners (GPs). These general practitioners provide primary health care services to people. On their referrals, hospitals provide more services to patients taking into domain from psychiatric treatment to Accident and emergency department. There are privately owned pharmacies who supply prescribed medicine as per their contract with relevant health services. When patients need specialist transport to travel home, there is free ambulance service provided by NHS. There is voluntary ambulance service in UK (British Red Cross, St Andrews Ambulance Association and St John Ambulance). Scottish Ambulance Service is available if transport service by air is required in Scotland. Dentists can only charge NHS patients at the set rates for each country.

There are research evidences that UK has outstandingly poor record against treatment of ill health. Hospitals in UK are facing shortage of staff and underequipment. UK need, 75000 more doctors and nurses to meet standards in competing countries. The UK survival rates were 21st out of 23 countries for cervical cancer, 20th out of 23 countries on breast and bowel cancer and 19th out of 31 countries for stroke

Gap Analysis

There is no evidence about comparative study of service quality in hospitals of developed and developing countries. This research compares services provided in Public hospitals of UK and Private hospitals of Pakistan. Both types of health Care units in their domain have unique privileges, ethics and characteristics. On this basis, it is interesting to investigate how these two kinds of health care units differ in their operations to provide best quality services to their patients. Being a developed nation, it is clear that public health care units in UK provide much better services to their patients than that in private hospitals of Pakistan. Private health care units are always greedy to money. Management of These hospitals always tries to find out ways how to earn more with less investment.

Theoretical Framework

A comparative study-Service quality in public and private hospitals

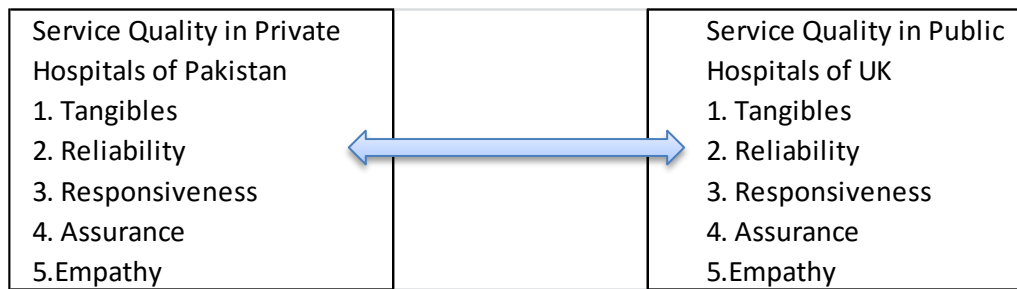


Figure 1 Comparison of Service Quality Dimensions

Research Questions

01. whether mean of all five dimensions of service quality between public Hospitals of UK and private hospitals of Pakistan is same or not?

02. whether ranking of all five dimensions of service quality between public Hospitals of UK and private hospitals of Pakistan is same or not?

03. whether similarities of all five dimensions of service quality between public Hospitals of UK and private hospitals of Pakistan is present or not?

Hypotheses Development

1H1: The public hospitals in UK are much better in tangibles than private hospitals in Pakistan

2H1: The public hospitals in UK are more reliable than private hospitals in Pakistan

3H1: The public hospitals in UK are more responsive than private hospitals in Pakistan

4H1: The public hospitals in UK provide more assurance to patients than private hospitals in Pakistan

5H1: The public hospitals in UK are more empathetic than private hospitals in Pak

Research Methodology

Research Design

This research work is descriptive and inferential in nature, whereby level of service quality of private hospitals in Pakistan and public hospitals of UK are compared. Statistical software package for social sciences (SPSS) was used to analyze data collected through questionnaire. Techniques of analysis are independence samples T-test.

Instrument Development

On the basis of SERVQUAL Model, Service quality has five components-tangible, reliability, assurance, empathy, and responsiveness. With some modifications,

SERVQUAL questionnaire is considered suitable to measure service quality in Hospitals (Caruana, 2002; Mengi, 2009; Zeithaml et al., 1996).

- Reliability

Reliability dimension has been measured with four items, It's Cronbach's Alpha value for sample in Pakistan and UK is 0.692 and 0.905 respectively.

- Responsiveness

Responsiveness dimension has been measured with four items, It's Cronbach's Alpha value for sample in Pakistan and UK is 0.605 and 0.748 respectively.

- Assurance

Assurance dimension has been measured with four items, It's Cronbach's Alpha value for sample in Pakistan and UK is 0.738 and 0.914 respectively.

- Empathy

Empathy dimension has been measured with four items, It's Cronbach's Alpha value for sample in Pakistan and UK is 0.821 and 0.865 respectively.

- Tangibles

Tangibles dimension has been measured with four items, It's Cronbach's Alpha value for sample in Pakistan and UK is 0.774 and 0.908 respectively.

Population and Sample

Population in this study is patients who are avail services, either for general consultation or inpatients, from public hospitals in UK and Private hospitals in Pakistan.

Sampling Technique

Convenient sampling technique was employed to collect data. Data was collected from patients regarding their hospitals located in Attock, Punjab, Pakistan and London, UK using self-administered questionnaire. Patients have provided their viewpoint about Khalid Saeed Hospital, Attock Medical Centre Maryam Hospital and Aljannat Hospital in Attock, Pakistan. Patients who go to King George Hospital, Royal Northern Hospital and Queen Elizabeth Hospital for Children for OPD or remained admitted, provided their perception about service quality in these hospitals. Two hundred fifty respondents have been approached in each country and response rate is 83.33%.

Data Analysis and Findings

Table 1 Group Statistics

	Pak and UK	N	Mean	Std. Deviation	Std. Error Mean
Reliability	UK	25	15.5200	3.80920	0.76184
	Pakistan	25	12.8400	2.71846	0.54369
Responsiveness	UK	25	15.0400	3.45784	0.69157
	Pakistan	25	12.2800	2.62234	0.52447
Assurance	UK	25	15.8000	4.08248	0.81650
	Pakistan	25	12.4800	3.20312	0.64062
Empathy	UK	25	18.1667	4.41998	0.90222
	Pakistan	25	15.7200	4.08779	0.81756
Tangibles	UK	25	16.1200	4.02409	0.80482
	Pakistan	25	13.8000	3.18852	0.63770

From group statistic, it is clear that overall mean of service quality in public hospitals of UK are higher than those of private hospitals in Pakistan. Patients are getting better service quality than private hospitals of Pakistan. Assurance has highest value and responsiveness has least mean value for service quality in hospitals of UK. Empathy has highest but responsiveness has least mean value in the context of Pakistan hospitals. Private hospitals of Pakistan and public hospitals of UK, both are performing at same level i.e. least mean value in responsiveness dimension of service quality. London city is considered as business hub of world. World best qualified professors and expert are available in public hospitals of United Kingdom. These hospitals are also associated with best medical colleges of UK. Thus it has increased assurance level among patients. There are strong research evidences about shortage of personnel in health sector of UK. Patients prefer to visit private hospitals in Pakistan everywhere but expert and qualified doctors exploit this scenario, they often visit their clinics late and patients are being awaited. In private hospitals of Pakistan normally experts are available in evening because of their public job in morning and in each hospital hardly one specialist is available. These factors have reduced level of responsiveness in health sector. Hence service quality in public hospitals of UK is better than those in private hospitals of Pakistan.

Table 2 Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Reliability	Equal variances assumed	2.054	0.158	2.863	48	0.006	2.68000	0.93595
	Equal variances not assumed			2.863	43.411	0.006	2.68000	0.93595
Responsiveness	Equal variances assumed	1.463	0.232	3.180	48	0.003	2.76000	0.86795
	Equal variances not assumed			3.180	44.745	0.003	2.76000	0.86795
Assurance	Equal variances assumed	0.212	0.647	3.199	48	0.002	3.32000	1.03782
	Equal variances not assumed			3.199	45.428	0.003	3.32000	1.03782
Empathy	Equal variances assumed	0.003	0.954	2.013	47	0.050	2.44667	1.21557
	Equal variances not assumed			2.010	46.338	0.050	2.44667	1.21754
Tangibles	Equal variances assumed	0.187	0.667	2.259	48	0.028	2.32000	1.02684
	Equal variances not assumed			2.259	45.616	0.029	2.32000	1.02684

For reliability, value of Levene's test shows $p - values = 0.158 > 0.05$ which is insignificant. Thus variance of reliability for UK and Pakistan is same. Table 2 Independent sample T-Test shows value of $t = 2.863, df = 48$ and $p - value = 0.006 < 0.05$. Hence reliability level of service quality in public hospitals of UK is high than that of private hospitals in Pakistan and H1 is accepted.

Lavene's test has $p - values = 0.232 > 0.05$ for responsiveness which is indication of equal variance of both samples. Table 2 has values $t = 3.180, df = 48$ and $p - value = 0.003 < 0.05$. Therefore reliability of public hospital in UK is greater than those of private hospitals in Pakistan. Hence, H2 is accepted. Although, these two are lowest level among five dimensions of service quality in responsiveness segment

Lavene' test has $p - values = 0.647 > 0.05$ which is insignificant. There is equal variance for both samples from UK and Pakistan. Table 2 has $t = 3.199, df = 48$ and $p - value = 0.002 < 0.05$. Therefore assurance level is high in public hospitals of UK than those in private hospitals of Pakistan. Hence, H3 is accepted. Public hospitals of UK have highest assurance among other service quality constructs.

Fourthly value of Lavene' test is provided $p - values = 0.954 > 0.05$ which is insignificant. There is equal variance for both samples of collected data. From table 2 independence samples test, it is clear that $t = 2.013, df = 47$ and $p - value = 0.050 < 0.05$. Therefore, H4 is accepted.

According to Lavene's Test, variance for both groups is equal as $p - values = 0.667 > 0.05$. Table 2 shows values $t = 2.259, df = 48$ and $p - value = 0.028 < 0.05$.

0.028. Therefore public hospitals of UK are serving high in tangible aspect than private hospitals of Pakistan. Hence H4 is accepted.

Discussion

Private hospitals in Pakistan are making efforts to grasp largest share of market as compared to public hospitals. Private hospitals depend on customers. Private hospitals are always run keeping their financial constraints in control to increase profitability. Thus it is the major reason for highest value of empathy in private hospitals of Pakistan. Private hospitals are very conscious about their patients. All personnel of hospitals try to provide care and support in order to create a friendly environment for patients. Private hospitals make sure healthy environment, availability of nurses, sterilized equipment, pharmacy and medical test facilities. Management of private hospitals uses feedback mechanism to monitor and control procedures. However, financial constraint brings obstacle to hiring expert and professionals thus level of assurance in private hospitals is at its lowest among other service quality constructs.

Assurance level in public hospitals of UK is higher than those in private hospitals of Pakistan. UK Government is very interested about healthcare sector in their country especially new projects. HealthCare department is provided high financial budget. World best professional and experts are employed in public hospitals

Recommendations

This study compares service quality in public hospitals of Attock City, Pakistan with public hospitals in Capital London, United Kingdom. Attock is a very small city with respect to London in every way. Comparison of service quality in private hospitals located in Islamabad Capital of Pakistan with those in public hospital of London UK may result in some different aspects.

A study can be conducted to investigate difference about perception in service quality about public hospitals of developed and developing countries. Different parameters can be taken into account to analyze their impact over the relationship of service quality and customer's satisfaction.

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References

Abdullah, A. K. M. A., & Kassim, N. M. (2009). Measuring perceived service quality in Qatari Islamic banks. *Journal for International Business and Entrepreneurship Development*, 4(1-2), 90-106.

Ahmed, J., & Shaikh, B. T. (2008). An all time low budget for healthcare in Pakistan. *Journal of the College of Physicians and Surgeons Pakistan*, 18(6), 388.

Al-Tamimi, H. A. H., & Al-Amiri, A. (2003). Analysing service quality in the UAE Islamic banks. *Journal of Financial Services Marketing*, 8(2), 119-132.

Andaleeb, S. S. (2001). Service quality perceptions and patient satisfaction: a study of hospitals in a developing country. *Social science & medicine*, 52(9), 1359-1370.

Appannan, S., Doraisamy, B., & Hui, T. X. (2013). CUSTOMER PERCEPTION ON SERVICE QUALITY OF COMMERCIAL BANKS: A CASE STUDY IN PENANG, MALAYSIA. *Academic Research International*, 4(5), 459.

Araja, D., & Kølves, K. MANAGED ENTRY AGREEMENTS FOR NEW MEDICINES IN THE BALTIC COUNTRIES. *TEN*, 27.

Berry, L. L., Zeithaml, V. A., & Parasuraman, A. (1985). Quality counts in services, too. *Business horizons*, 28(3), 44-52.

Cacioppo, K. (2000). Measuring and managing customer satisfaction. *Quality Digest*, 20(9), 49-57.

Caruana, A. (2002). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European journal of marketing*, 36(7/8), 811-828.

Davis, K., Stremikis, K., Schoen, C., & Squires, D. (2015). Mirror, Mirror on the Wall, 2014 Update: How the US Health Care System Compares Internationally, The Commonwealth Fund, June 2014.

Davis, K., Stremikis, K., Squires, D., & Schoen, C. (2014). Mirror, mirror on the wall: how the performance of the US healthcare system compares internationally. The Commonwealth Fund.

Demographic, P. (2013). Health Survey 2012–13: Islamabad. *Pakistan, and Calverton, Maryland USA: National Institute of Population Studies and ICF International*.

Donabedian, A. (1980). Basic approaches to Assessment: Structure, Process, and Outcome In: The Definition of Quality and Approaches to its Assessment: Explorations in Quality Assessment and Monitoring, Volume Health Administration Press. *Ann Arbor, Michigan*.

Golmohammadi, A., & Jahandideh, B. (2010). Prioritizing service quality dimensions: A neural network approach. *World Academy of Science, Engineering and Technology*, 4, 231-236.

Grönroos, C. (2000). Service marketing and management: a customer relationship management approach. *European Business Review*, 20(4), 298-314.

Hossain, M., & Leo, S. (2009). Customer perception on service quality in retail banking in Middle East: the case of Qatar. *International Journal of Islamic and Middle Eastern Finance and Management*, 2(4), 338-350.

Ismail, M. B., Yusof, Z. M., & Ikhsan, S. O. S. S. (2000). DOES KNOWLEDGE SHARING HELP IMPROVES PUBLIC SECTOR SERVICE DELIVERY? A CASE STUDY OF THREE SELECTED GOVERNMENT AGENCIES.

Mengi, P. (2009). Customer satisfaction with service quality: An empirical study of public and private sector banks. *IUP Journal of Management Research*, 8(9), 7.

Mudie, P., & Pirrie, A. (2006). *Services Marketing Management*. 3. painos: Elsevier Ltd. Great Britain.

Mushtaq, M. U., Gull, S., Shad, M. A., & Akram, J. (2011). Socio-demographic correlates of the health-seeking behaviours in two districts of Pakistan's Punjab province. *JPMA-Journal of the Pakistan Medical Association*, 61(12), 1205.

Nishtar, S. (2009). Choked pipes: reforming Pakistan's mixed health system: JSTOR.

Oliver, D. (2016). David Oliver: The best health system. *BMJ*, 353, i1848.

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), 15-30.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *the Journal of Marketing*, 41-50.

Sabih, F., Bile, K., Buehler, W., Hafeez, A., Nishtar, S., & Siddiqi, S. (2010). Implementing the district health system in the framework of primary health care in Pakistan: can the evolving reforms enhance the pace towards the Millennium Development Goals?

Shaikh, B., Mobeen, N., Azam, S., & Rabbani, F. (2008). Using SERVQUAL for assessing and improving patient satisfaction at a rural health facility in Pakistan.

Williams, S. J., & Calnan, M. (1991). Key determinants of consumer satisfaction with general practice. *Family practice*, 8(3), 237-242.

Wong, J. C. (2002). Service quality measurement in a medical imaging department. *International Journal of Health Care Quality Assurance*, 15(5), 206-212.

Zeithaml, V., Bitner, M., & Gremler, D. (1996). *Services Marketing* McGraw Hill. New York.