

# Reforms in Public Sector Hospitals of KPK (Pakistan) and Its Impact on Patient's Satisfaction: An Empirical Study

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## Abstract

Health care organizations function in multidimensional environments and their organizational cultures are complex and demanding. The expectations from health care services are high and as a result patients want the most effective and latest possible treatments, while the politicians demand responsible services. As far as healthcare professionals are concerned they require motivating and challenging work environments. All these goals and objectives can be at the root of wicked problems in healthcare management. Thus, this research paper aims to assess the impact of reforms like decentralization, health care financing and the use of information communication technology (ICT) on Patients satisfaction in public hospitals of KPK (Pakistan). The aim of these reforms was to solve the problems encountered in health care systems and to improve healthcare systems. Findings show that there is positive relationship between reforms and increase in Patient's satisfaction

**Keywords:** Reforms, Decentralization, Health care Financing, ICT'S in the Health Care, Quality of service, Patient Satisfaction

## 1. Introduction

The health sector reforms are mostly defined as the continuous meaningful modification to upgrade competency in health sector (Peter Berman,1995). Health sector reforms is a maintained procedure of key change in approaches and game plans of the health sector, generally guided by the administration. This handle sets out an arrangement of approach measures covering the three fundamental center elements of the health system like governance, provision, and financing.

Being a third world country Pakistan does not have sufficient resources to upgrade its health care system. Pakistan health care system face different issues like Management, Payment, Politics, Accountability, Clean water and Technology. These issues emphasize the requirement for creative health sector reforms. The spending of Pakistan in health sector is comparatively low and needs to be improved as it is the dire need of the day. Government focuses on four key components 1) organization and governance 2) medicinal services financing 3) regulation 4) behavior.

Health Sector reforms, through expanding the human services financing, decentralization and improving use of ICT'S with the mediation part of health care serves is the key idea of present study. Decentralization is a reform that mostly concerns with political perspective, shaped to distribute the basic power at each level and upgrade the local freedom and it also affects the health sector performance. ICT'S is the useful tool for those endeavoring to improve prosperity (Daly, 2003). Healthcare financing is key segment to the health structure for human wellbeing. The term social insurance financing suggests the developments in which money is raised to perform health activities and how it is used (CMH, WG 3, 2002).

Quality of service or design quality is the degree to which the administration plans to cater to its customer needs and desires. In the meantime, quality of service also considers higher necessities for the customers (Meirovich, 2005). By having a strong medicinal service set up administration system will engage human services providers to deliver better quality and worth to patients (Radhika *et al.*, 2007). Patient satisfaction has expanded more significantly in developing countries in the current decade (Camgoz-Akdag and Zineldin, 2010).

## 2. Literature Review

Pakistan being the sixth most populous nation with a population growth rate of 1.91% per annum and total population of 191.71 million shows significant connection between health and development. (Mashhadi, S. F., *et al.* 2016). Healthcare frameworks around the globe are experiencing revolutions, developments or changes (Orszag and Emanuel, 2010; Braithwaite *et al.*, 2015). In United State of America, the presentation of “The Patients Protection and Affordable Care Act” should sign changes to every angle of healthcare (Huntington, 2011). In a parallel way, the United Kingdom, history of healthcare reforms (Klein, 2013), as that of late start principle move through appointing general professionals (Greaves *et al.*, 2012) in health care rather than specialists.

Let us a take a glance at various sorts of changes in health care sector happened in numerous nations. For instance, Decentralization changes in like manner occurred in various territories especially in Africa, Latin America and some Asian countries. (Grundman, 2000). Decentralization has turned into a standard segment of health policy and also seen as most proper for the health sector.

Pakistan is a constitutional federation with authorities shared between the national government and its four provinces (Balochistan, the Kaber Pakhton Khua (KPK), Punjab and Sindh). The political history of Pakistan is generally ruled by the military and Public Administration for the most part responsible for the provincial government (Cheema, Khwaja, & Qadir, 2006). In Pakistan, provinces were made up of districts (Zilas) whose governments were headed by indirectly elected district Councilors (Nazims) and assemblies. Under a governmental reorganization in 2001, some decision-making authorities were devolved to elected officials at provincial and district levels. In the health sector, devolution has meant that the provincial department of health was responsible for policymaking and regulation while service provision, including delivery of services and reporting of staff at the district and sub-district levels, was almost entirely devolved to district governments. Important exceptions to this process of decentralization involved large teaching hospitals and several human resources functions of higher-level staff (e.g., posting/ transfers), both of which remained under the control of provincial governments.

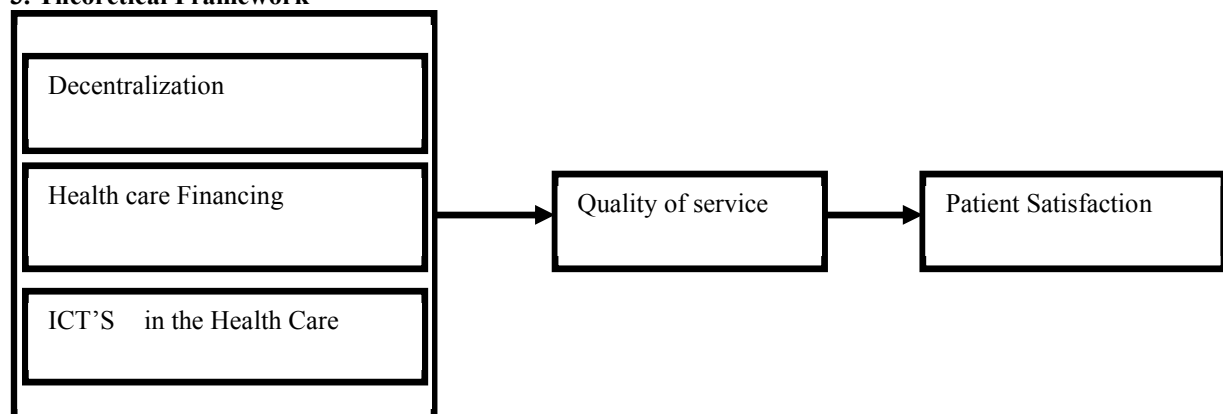
Information Communication Technology is the main tool to maintaining and controlling the healthcare programs. Research proves where ICT’S used in concentration it increases the satisfaction level of Patients. Organization arrangements and methods specifically influence general Patients satisfaction (Marley *et al.*, 2004). Administrative organization quality energizes focus organizations by expanding the estimation of the customer's involvement (McDougall and Levesque, 1994; Dagger *et al.*, 2007).

It seems that mostly in the case of Patients who are satisfied with hospital administration, staff and environment is more responsible and anxious to consume their medication (Guldvog,1999). A couple of surveys were coordinated in late 20<sup>th</sup> century which show that where reforms in health care system occurred Patients were more satisfied especially in European countries (Crow *et al.*, 2002). Various surveys show there is a constructive link between age and satisfaction. (Bruster *et al.*, 1994). Additionally, nurses, physicians and environment of hospitals also help to enhance the Patients satisfaction. (Cleary *et al.*, 1989).

H<sub>1</sub>: Decentralization, Health care financing and ICT’S in the Health Care have significant impact on Patients satisfaction.

H<sub>2</sub>: Quality of service mediates the relationship between Decentralization, Health care Financing, ICT’s in the Health Care and Patients Satisfaction

## 3. Theoretical Framework



## 4. Methodolog

To explore the linkage between independent variable, mediating and dependent variable, correlation, regression

as well as reliability test were used. Public sector hospitals are the unit of investigation where health care reforms are implemented is the main focus of this research. The researcher has collected sample from three public sector hospitals where health reforms are executed. The sample size of one hundred and fifty respondents was chosen from three different hospitals. A research questionnaire was used for gathering the data. Mostly respondents were the Patients and their attendant who had been utilizing services of these hospitals. The questionnaires utilized a 5 point Likert scale and calculated the amount of employees' autonomy and their contribution in decision making. The Decentralization and ICT'S scale was adopted out of four questionnaires (Johanna Virtanen *et al.*, 1976). The Quality of service scale comprised five questions and also utilized a five point Likert scale. Ware, Snyder, and Wright created the Patients Satisfaction Questionnaire in 1976 for the NCHSR. The National Center for Health Services Research project was approved out between 1972 and 1976 at the Southern Illinois University School of Medicine.

## 5. Results

**Table 1: Results of Reliability Analysis**

Variables	Cronbach's alpha
Quality of Service	.681
Patients Satisfaction	.910
Health Care Financing	.636
Information Communication Technology (ICT)	.612
Decentralization	.880

Reliability analysis state that Cronbach's alpha values of the construct is above from the general acceptable scale (0.5) Decentralization was measured by 4 items scale the Cronbach's alpha of which is .880. Human services financing was measure by 4 items scale the Cronbach's alpha of which is .612. ICT's in social insurance financing was measured by 5 items scale which holds the alpha estimation of .636. Nature of administration was measure by 5 items scale which holds the Cronbach's alpha estimation of .681 and the Patients fulfillment was measure by 17 items scale and the Cronbach's alpha of which is .910.

### Demographic Characteristics of Respondents

**Table 2: Demographic distribution of respondents**

Items	Frequency	Percent (%)
<b>Age</b>		
20-25	29	19.3
26-30	32	21.3
31-35	68	45.3
36-40	11	7.3
41-45	4	2.7
46-50	3	2.0
Above 50	3	2.0
<b>Patients</b>		
Indoor Patients	128	85.3
outdoor Patients	22	14.7
<b>Gender</b>		
Male	135	90.0
Female	15	10.0

Table 2 represents that majority of respondents were aged between 31-35-year-old (45.3%). The members who were between the age 26-30 (21.3%), with (19.3%) aged between 20-25, followed by (7.3%) aged between 36-40 years old. The members who were 41-45-year-old, their percentage were (2.7%) and in the last the respondents who were 46-50 and above 50 had same percentage (2%).

Second part of table shows indoor and outdoor percentage and frequency distribution of Patients type. It shows that the largest number (128) of participants were indoor patients. The participants' frequency distribution and ratio was 128 and 85.3% respectively. The outdoor patients were 22 and its percentage was 14.7% respectively.

The table above also demonstrate that the biggest number (135) of members were male. The members' recurrence circulation and proportion was 135 and 90% individually. The females were 15 and its rate was 10% separately.

**Table 3: Correlations for the Subscales**

Variables	Quality of Service	Patients Satisfaction	Health Care Financing	ICT'S	Decentralization
Quality of Service	-				
Patients Satisfaction	.769**	-			
Health Care Financing	.443**	.473**	-		
ICT'S	.392**	.446**		-	
Decentralization	.392**	.375**	.491**	.255**	-

Table 3 shows the relationship among the Quality of Service, Patients Satisfaction, Health Care Financing, ICT'S and Decentralization.

Quality of Service has strong positive significant relationship of i.e., .769\*\* with Patients Satisfaction. Increased Quality of Service will in a result of increasing Patients Satisfaction.

There is a positive significant relationship found between Health Care Financing and Quality of Service as well as Patient Satisfaction. The correlation .443\*\* shows that as Health Care Financing Increase the Quality of Service will also increase, whereas the correlation value of and patient satisfaction is .473\*\* which shoes that increase in health care financing will also increase patient satisfaction.

ICT's have a significant positive correlation with Quality of Service and patient satisfaction. Having values of .392\*\*, .446\*\* respectively. It can be interpreted that increase in ICT's will enhance service quality as well as patient satisfaction.

Decentralization has a significant positive correlation with quality of service, patient satisfaction, health care financing and ICT's having values of .392\*\*, .375\*\*, .491\*\* and .255\*\* respectively. It is evident from the above findings that decentralization will enhance quality of service, patient satisfaction, health care financing and ICT's.

**Table 4: Decentralization, Healthcare Financing and ICT'S with the mediating effect of Quality of service on Patients Satisfaction**

Model	Model Summary							
	R	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
	Square	Square	Change	F	df1	df2	Change	
1	.575 <sup>a</sup>	.331	.24874	.331	24.058	3	146	.000
2	.794 <sup>b</sup>	.630	.18557	.299	117.310	1	145	.000

a. Predictors: (Constant), Decentralization, Information Communication technology, Health Care Financing

b. Predictors: (Constant), Decentralization, Information Communication technology, Health Care Financing, Quality of service

Model 1 of Table 4 shows that variance explained by the independent variable Decentralization, Health care Financing and ICT'S on the dependent variable of Patients Satisfaction and is 33 % while the value of R<sup>2</sup> is .331. While model 2 of table 4, summary table show that the combined variance of the mediators and the IV's i.e., the Quality of service (Mediating), Decentralization, Health care Financing and ICT'S explained variance of 63 % on dependent variable that is patients Satisfaction having the R square value of .630. Change in R square is 29.9 % having value of .299. It shows that Quality of service (Mediating), Decentralization, Health care Financing and ICT'S has significant impact on Patients Satisfaction.

**Table 5 of Coefficients: Decentralization, Health care Financing and ICT'S with the mediating effect of Quality of service on Patients Satisfaction**

	Model	Coefficient				
		Un-standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.571	.287		5.480	.000
	Health Care Financing	.182	.051	.289	3.590	.000
	ICT'S	.331	.079	.304	4.189	.000
	Decentralization	.069	.034	.156	1.992	.048
2	(Constant)	.545	.234		2.330	.021
	Health Care Financing	.077	.039	.123	1.984	.049
	ICT'S	.154	.061	.141	2.514	.013
	Decentralization	.011	.026	.024	.403	.688
	Quality of service	.600	.055	.650	10.831	.000

a. Dependent Variable: Patients satisfaction

Model 1 of table 5 of coefficients summary table shows that p-value is (Sig.) of the variables of Decentralization, Health care Financing and ICT'S is less than  $\alpha$ . So  $H_1$  will be accepted.

$H_1$ : Decentralization, Health care Financing and ICT'S in the Health Care have significant effect on Patients satisfaction. [Accepted]

In model 2 of table 5 shows that p-value (Sig.) of the variables of Health Care Financing, ICT'S and Quality of service is less than  $\alpha$  (0.05). When Quality of service is mediator between decentralization and Patients satisfaction the p-value is more than  $\alpha$  (0.05). So Quality of service is fully mediating in model 2.

## 6. Implications and limitations

One of the basic limitations of this investigation was the data was gathered at one point of time. Lack of funds and deficiency of time were other limitations. This investigation was held at KPK public sector hospitals. Along these lines, the extension can be expanded and the investigation may be held in other public and private sectors at national level too. To investigate and evaluate the results regression and correlation analysis was utilized. Different statistical tools and extensive number of respondent should be used for better results. Moreover, qualitative technique (like interviews) for information gathering may also be utilized for more inclusive outcomes. The number of respondent's/sample size but a sufficiently large sample size will increase the accuracy findings. While managing with the demographic elements it was noticed that the females were less available for information accumulation. The respondent in age group over forty were not easily available.

The examination has demonstrated that reforms in health sector upgrade the Patients satisfaction in spite of the fact that there is a need to enhance the cleanliness circumstance as well as cafeteria state of public sector hospitals. As indicated by the given outcome, satisfaction level can be increased through strong commitment in public sector hospitals.

## 7. Conclusion

The impact of reforms was the main objective of this research in public sector hospitals. With the help of questionnaire this research was compiled from three different public sector hospitals. The information was gathered with the help of questionnaires.

Correlation and Regression Analysis were used to obtain the results with help of SPSS. Results show that there is a strong relationship between independent variables, dependent variable and mediating variable. Patients were satisfied where reforms were executed.

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