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The Integral Connection between Strategy, Human Resources and Quality Treatment within the Hospitals of a Developing Country

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Abstract

Purpose: Hospitals are key to ensuring the healthy and sustainable society. Quality is of utmost importance while treating the patients. Human lives depend upon the quality treatment services offered by the hospitals. The purpose of the study was to determine how different quality aspects like strategic quality planning, Information and analysis, Leadership and human resource utilization improves quality in the health sector.

Designed/Methodology/Approach: This research started with a broader view of literature about the impact of Leadership, strategic quality planning on the incremental quality in the health sector. The data were collected from doctors and paramedical staff in the hospitals of an underdeveloped region in a developing country. The adopted questionnaire on Likert scale were used to collect the data during the survey. The questionnaires were filled by middle management employees of each hospital who were working for at least a year. All candidates had at least graduation in qualification.

Findings: The strategic quality planning was found to be influencing the treatment quality. It helps to improve the treatment quality, patient satisfaction and quality improvement in the hospitals.

Scope of Study: Total Quality Management (TQM) is an essential success factor for large- and small-scale hospitals. There are limited challenges faced by hospitals regarding quality, efficiency and inadequacy.

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Limitation: The health sectors should give more importance to TQM and quality improvement so that their customers and patient may not switch to other hospital. Future study can be directed by enhancing sample size.

Keywords: *Human Resources, Quality Treatment, Health Sectors*

INTRODUCTION

The total quality management is a very important technique that is used by firms and company to improve their efficiency and performance. In the global market, competition continues to get harder and it is becoming essential and important for firms and companies to provide more consistent and better-quality products and services to their customers. TQM is the tool for handling the future outcomes or problems, it is not just about improving the product and services, it also insures as it is the mechanism of running a business and managing a business process that one may provide satisfaction to the customer in every phase. TQM makes the organization able to make the right decision at the right time in their first endeavor. Total quality management is a set of such a principle that tells the organization how to use their resources in the best way to increase the satisfaction of stakeholders. But each principle of quality management on the effectiveness of the organization is still augmented. Most of the research says that quality management principles have applied to the overall performance and objectiveness of the organization. Most of the studies and researches show their strong and positive relationship. According to (Hendrick & Singhal) in 2001, implantation of total quality management is an essential factor that enhances the effectiveness of the organization. In the global competitive world Total Quality Management (TQM) is an essential success factor of large and small organizations. There are several challenges are faced by healthcare center and hospitals regarding quality, efficiency and inadequacy. The health sectors should give more importance to TQM and quality improvement so that their customers and patient may not switch to another health sector or hospitals (Hasin et al., 2001). Total quality management has come up as such a factor that provides a solution to enhance the effectiveness and efficiency of healthcare organizations (hospitals). The philosophy of total quality management used to enhance the optimization's performance and their services (Lingaraj & Khamalah, 2003).

Most of the healthcare centers in Pakistan are unable to provide quality healthcare services. Quality management approaches are used

by many healthcare managers. It helps them to improve system related healthcare and make healthcare more efficient to gain ultimate desired outcome, which includes patient satisfaction, leadership, human resource utilization, patient satisfaction and efficient performance. The aim and purpose of total quality management are to enhance the competition between the organization through which they can improve their quality continuously.

The total quality management first coined by Naval Air Systems Command in 1985 to articulate Japanese management setup on quality control (Bemowski, 1992). During the 1980s the TQM was used in many health sectors, hospitals. Due to succeed in many industries after adopted the TQM approaches and strategies in their systems and process that lead to better performance. This approach also motivates the managers in healthcare to use TQM in healthcare sectors as well to improve their quality and management. As the result in last 30 years, mostly health care sectors used and implement TQM as a core strategy that help them to improve quality services continuously, minimize the errors related to the medial point of view and also increase the health services. Besides these many sectors have also poor experience with TQM, as they are not much satisfied with their Total Quality management programmed (Martin & Huq, 2000).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

During 1990s Total quality management has one of the most important competitive approaches used by many firms and this approach has been extensively used or implemented around the world. This study was examined by Rad in 2006. It is a competitive strategy which helps the firm to sustain an increasingly volatile environment. Managers at any firm or company want to keep their firm competitive, that is why TQM is used as a competitive strategy in most of the firm in Pakistan.

The review of many pieces of literature related to TQM has evidence that several studies have been done for the successful implementation of total quality management in many sectors. According to Sirias, Mehra and Hoffman, 2001 it was examined that there are 45 major TQM practices are extensively studied. These 45 TQM practices are classified into five sectors, which have a key role in operating any business of any kind. The five categories involved the human resource department, the orientation

of customers. Quality instruments, support of distributors or suppliers and management approaches.

Leadership and Total Quality Management

The leadership and the culture are the most important factors of the firm or organizations that enable the organization to successfully implement the total quality management. The study that was started by Radnay in 1997. In 1991, Gravin D. A. described the principle of total quality management that was implemented by the Malcolm Baldridge quality awarded companies. The leadership of top executives, Training of the employees, empowering the employees and their participation in the decision-making process and lastly, Identifying the key element that becomes the cause of fostering continuous improvement. The number of key factors of TQM is supported and directed by the (MBQA) Malcolm Baldridge quality awards examined by (Radnay, 1997; Seraph, Schroeder & Benson, 1989). The role of leadership in implementing the principles of total quality management is very major. Leadership in every company created an environment in which customers satisfaction, quality management and control, sharper the strategic vision of the firm, enhancing the problem prevention capabilities, reducing the resistance to change and enhancing the awareness of the external threats. In 1993 Waldman et al. Identified that without leadership TQM can't be implemented successfully as it is an essential component for improvement of the quality process (in press, p. 35)

TQM is used not only in manufacturing firm but also in hospitals as well. It helps to improve performance, provide quality of services through contentious improvement, increase effectiveness, the productivity of the organizations and the firm's competitive edge (Oakland, J., 1993). TQM used for the improvement of overall firm's functions and their structure. To implement successful and effective TQM as strategic participation and corporation of employees is must require. After reviewing the recent literature, we developed the following hypothesis,

H1. Leadership is positively associated with quality treatment.

H2. Leadership is positively associated with quality management.

Human Resource and Total Quality Management

According to Juran J. M., 1989 analyses that through TQM expectation of customers are increased and fulfilled, it focuses on the development and improvement of the HR management system, makes effective planning through TQM that used as a competitive approach and adopt a leadership style that supports the initiatives to improve the quality and services. Every firm or industry invest a lot of money in a training program. This type of program the company motivate and encourages the employees who worked in the organization to take part in the decision-making process and give their appropriate suggestion if firms required in any working process. Waldman (1995), produced a study that describes the importance of human capital in a firm. He measured that TQM is successfully implemented if organizations empowering their employees to participate in decision making and quality improvement.

Proper implementation of the policies, effective functioning of the human resource department, effective implementation of the firm's planning programmed and the continuous improvement in performance (in hospital context). Previous studies and researches have evidence that TQM and performance of the firm have a positive relationship with each other. The early evidence on TQM shows that the practices and the approaches of TQM are the vital steps to enhance a firm's performance and effective implementation of total quality management. (Sila, I. & M. Ebrahimpour, 2002). According to the previous literature we developed the given hypothesis,

H3. Human resource utilization is positively associated with quality treatment.

H4. Human resource utilization is positively associated with quality management.

Quality Planning and Total Quality Management

Everyone should involve in the decision-making process and quality improvement through which level of satisfaction will be fulfilled (Dale, B., 1999). Many hospitals healthcare center seriously focuses on total quality management so that they can provide the quality of health services

and gain the patient's satisfaction. TQM used in any terms in health sectors according to Arasli, H, TQM is defined as the satisfaction from service and quality. Proper implementation of the policies, effective functioning of the human resource department, effective implementation of the firm's planning programmed and the continuous improvement in performance (in hospital context). Previous studies and researches have evidence that TQM and performance of the firm have a positive relationship with each other. The early evidence on TQM shows that the practices and the approaches of TQM are the vital steps to enhance a firm's performance and effective implementation of total quality management. (Sila, I. & M. Ebrahimpour, 2002). In 1989, P.G. Benson and R.G. Schroeder examined that the practice of total quality management in the previous research includes leadership of top executives. Duties and functions of quality improvement sectors, training of the employees at all level, designing of the new product and services, the satisfaction of the customer by meeting their needs and expectations. Effective relationship with co-workers. Total quality management has significant importance as it helps the firms to increases their profit and revenue as well also help to enhance the growth of the company in the competitive environment. According (Waldrnan, 1993) study most of the companies in the US and other developing countries see that their growth rapidly increased because of the implementation of the TQM practices in their system.

According to (MBQA), 1993. All the parts of the operation unit and working sectors required continuous improvement in their operation and system. Deming W. E. (1986) found that organization has a need to improve their quality continuously, not for the maximizing profitability, but it also enables the organizations to sustain in a competitive environment. According to the previous literature we developed the following hypothesis,

H5. Strategic quality planning is positively associated with quality treatment.

H6. Strategic quality planning is positively associated with quality management.

Information with Analysis and Total Quality Management

Everyone should involve in the decision-making process and quality improvement through which level of satisfaction will be fulfilled (Dale, B., 1999). Many hospitals healthcare center seriously focuses on total quality management so that they can provide the quality of health services and gain the patient's satisfaction. TQM used in any terms in health sectors, according to Arasli, H, TQM is defined as the satisfaction from service and quality. Proper implementation of the policies, effective functioning of the human resource department, effective implementation of the firm's planning programmed and the continuous improvement in performance (in hospital context). Previous studies and researches have evidence that TQM and performance of the firm have a positive relationship with each other. The early evidence on TQM shows that the practices and the approaches of TQM are the vital steps to enhance a firm's performance and effective implementation of total quality management. (Sila, I. & M. Ebrahimpour, 2002). In view to previous literature we developed the following hypothesis,

H7. Information and analysis are positively associated with quality treatment.

H8. Information and analysis are positively associated with quality management.

To provide the quality of health service in this increasingly volatile environment is very difficult rather than providing other services. Everyone wants to have better health treatment and service. In the global competitive world Total Quality Management (TQM) is an essential success factor of large and small organizations. There are several challenges are facing by healthcare center and hospitals regarding quality, efficiency and inadequacy. The health sectors should give more importance to TQM and quality improvement so that their customers and patient may not switch to another health sector or hospitals (Hasin et al., 2001). Many hospitals are now focused on how they can provide the quality of health service so that they can satisfy their patients. Patients are considered a key component in every health sector. The performance of every health sector could easily measure based on patient satisfaction and their delivery of effective healthcare Services Duggirala et al. (2008).

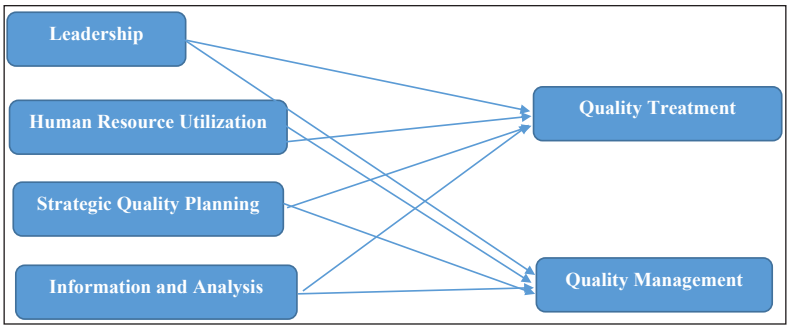

Fig. 1: Research Model

Methods

It was a causal study the causality predictors and outcome variables were analyzed. The data were collected at one point in time cross-sectionally. The study lasted for six months. Conditions were naturally observed in the non-contrived setting. Medical doctors and paramedical staff were taken as respondents. Other hospital employees were excluded from the study who were not directly relevant to the study. It is important to note that Doctors were also practicing their medical profession after their regular jobs' timings at concerned hospitals. Adopted questionnaires were distributed among the respondents and they were given one-week time to fill it. Some questionnaires were got filled in the presence of the researcher. Moreover, Online questionnaire using google forms were also floated through social media including Facebook, Linked In, and What's app. The respondents were geographically disbursed across Pakistan. Respondents queries about the study and constructs were clarified. The questionnaires consisted of three parts. First part provided the description of the study and ensured the data privacy given by the respondents. Moreover, the voluntary participation of the respondents was encouraged, and respondents were not paid for filling out the questionnaires. Second part fetched the construct data through a five-point Likert scale. All the construct was asked to respondents. Last part fetched their demographic information as suggested by the studies, putting demographic information at the end ensure more trust in the data provided. The respondents were not asked their names just to give them confidence and data privacy. Their obvious identities were altered in such a way that no other person can know about the propriety of the data.

Convenient sampling technique was applied. The medical staff is hard to reach in Pakistan due to heavy patient flow. Convenient sampling was the most suitable method available to us. We approached the respondent through our personal reference and further their references. It is a better way to get reliable data because doctors and staff feel secure about the privacy of the data provided, and accuracy is very much higher as per Pakistani cultural context. Data collection took one month in total.

Data came from a doctor of famous medical hospitals in the southern Punjab region. From six hospitals respondent were selected in different numbers. Overall the responses show a collective opinion from southern Punjab region. Online data was collected from all over Pakistan. Originally, a sample size of 200 was intended because our questionnaire consisted of 30 questionnaires. The ratio calculated as multiple items (7x no. of Items). However, due to loads of patients and high doctor to patient ration in Pakistan, a reduced sample composed of 120 responses was received and verified. Incomplete questionnaires were asked to be refilled by the respondent. Data were analyzed using Smart PLs 3 software package. All the latent constructs were reflective in nature. Their items were like one and other. The benefit of using the software is it analyzes the whole model in one go. Non-significant results are also reported to avoid file drawer problem has been identified by the many researchers to avoid duplication of research, saving of resources and reporting the results to policy makers to make informed decisions.

Table 1: Predictors' Latent Construct Items

Leadership (L)
L1: The senior executives provide highly visible leadership in maintaining an environment that supports quality improvement.
L2: The CEO/Administrator is a primary driving force behind quality improvement efforts.
L3: The senior executives consistently participate in activities to improve the quality of care and services.
L4: Senior executives seek information on needs and suggestions for quality improvement directly from external customers (e.g., patients, families, and payers).
L5: The senior executives have demonstrated an ability to manage the changes (e.g., organizational, technological) needed to improve the quality of care and services.

Information and Analysis (IA)
IA1: The hospital collects a wide range of data and information about the quality of care and services.
IA2: The hospital uses a wide range of data and information about the quality of care and services to make improvements.
IA3: The hospital continually tries to improve how it uses data and information on the quality of care and services.
IA4: The hospital continually tries to improve the accuracy and relevance of its data on the quality of care and services provided.
IA5: Hospital employees are actively involved in determining what data are collected for improving the quality of care and services.
IA6: The hospital compares its data to data on the quality of care and services at other hospitals.
Strategic Quality Planning (SQP)
SQP1: Hospital employees are given adequate time to plan for and test improvements.
SQP2: Each department and workgroup within this hospital maintains specific goals to improve quality.
SQP3: Hospital employees are involved in developing plans for improving quality.
SQP4: The hospital's quality improvement goals are known throughout the organization.
SQP5: Middle managers (e.g., department heads, program directors, and first-line supervisors) are playing a key role in setting priorities for quality improvement.
SQP6: Non-managerial employees are playing a key role in setting priorities for quality improvement.

Table 2: Predicted Latent Construct Items

Quality Management (QM)
QM1: The hospital regularly checks equipment and supplies to make sure they meet quality requirements.
QM2: The quality assurance staff effectively coordinate their efforts with others to improve the quality of care and services the hospital provides.
QM3: The hospital has effective policies to support improving the quality of care and services.
QM4: The hospital tries to design quality into new services as they are being developed.

QM5: The hospital encourages employees to keep records of quality measurements.

QM6: The hospital views quality assurance as a continuing search for ways to improve.

QM7: The services which the hospital provides are thoroughly tested for quality before they are implemented.

Quality Treatment (QT)

QT1: We have all the necessary to facilitate treatment.

QT2: Complaining regarding treatment are decreasing every day.

QT4: Patients do not have to wait for their treatment.

QT5: Doctors are always available for the treatment of patients.

RESULTS AND DISCUSSION

Data were analyzed using SMART Pls. two models were analyzed measurement model and structure model.

Measurement Model

Table 3

Latent Variables	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Human Resource Utilization	**0.858**	0.863	0.898	0.638
Information & Analysis	**0.866**	0.876	0.899	0.599
Leadership	**0.799**	0.823	0.862	0.558
Quality Management	**0.873**	0.875	0.902	0.569
Quality Treatment	**0.770**	0.769	0.853	0.593
Strategic Quality Planning	**0.807**	0.820	0.862	0.514

Cronbach is the measure of the reliability of the instrument. Its values range between 0-1. The higher the alpha the higher will be the reliability. The table produced the alpha values for different scales. All the values are above 0.7 which means the instruments used were reliable to be used in the study. They measured the underlying constructs consistently. AVE values are higher than 0.5, it means that convergent validity is established.

The instruments used and data collected is suitable for further analyses. Moreover, the table produced the value of more than 0.7 for each instrument it means composite reliability is established of the instrument. Overall, all the instrument utilized in this study were fit for the underlying constructs to collect the data from respondents.

Table 4: Discriminant Validity (Intercorrelations) of Variable Constructs Fornell-Larcker Criterion

	Latent Variables	1	2	3	4	5	6
1.	Human Resource Utilization	0.799					
2.	Information & Analysis	0.617	**0.774**				
3.	Leadership	0.549	0.589	**0.747**			
4.	Quality Management	0.705	0.688	0.637	**0.754**		
5.	Quality Treatment	0.625	0.475	0.424	0.444	**0.770**	
6.	Strategic Quality Planning	0.672	0.681	0.658	0.776	0.401	**0.717**

Fornell Larcker criterion develops the discriminants validity of the instruments. Since the values produced in the smart pls are higher than the value of 0.7, it proves that the Fornell-Larcker criterion is met, and the discriminant validity is established. It again reiterates that the instruments used in the study were suitable.

Table 5: Factor Loadings (Bolded) and Cross Loadings

Items	Human Resource Utilization	Information & Analysis	Leadership	Quality Management	Quality Treatment	Strategic Quality Planning
HRU1	0.805	0.494	0.469	0.588	0.456	0.589
HRU2	0.785	0.497	0.406	0.580	0.477	0.574
HRU3	0.853	0.548	0.492	0.663	0.496	0.550
HRU4	0.741	0.460	0.315	0.458	0.468	0.433
HRU5	0.807	0.468	0.495	0.530	0.580	0.537
IA1	0.421	0.698	0.428	0.518	0.286	0.483

Items	Human Resource Utilization	Information & Analysis	Leadership	Quality Management	Quality Treatment	Strategic Quality Planning
IA2	0.458	0.824	0.453	0.524	0.397	0.519
IA3	0.490	0.838	0.516	0.575	0.358	0.562
IA4	0.406	0.751	0.459	0.455	0.278	0.515
IA5	0.548	0.795	0.552	0.585	0.423	0.592
IA6	0.507	0.727	0.332	0.521	0.412	0.482
L1	0.311	0.356	0.736	0.369	0.310	0.435
L2	0.440	0.339	0.763	0.479	0.335	0.499
L3	0.474	0.580	0.866	0.563	0.394	0.628
L4	0.318	0.474	0.595	0.458	0.231	0.375
L5	0.495	0.459	0.750	0.513	0.288	0.481
QM1	0.587	0.501	0.460	0.761	0.488	0.558
QM2	0.551	0.586	0.455	0.771	0.330	0.629
QM3	0.573	0.510	0.471	0.756	0.336	0.621
QM4	0.493	0.484	0.492	0.732	0.350	0.586
QM5	0.494	0.493	0.498	0.774	0.227	0.570
QM6	0.515	0.497	0.537	0.774	0.357	0.580
QM7	0.507	0.560	0.449	0.709	0.254	0.541
QT1	0.526	0.383	0.286	0.337	0.798	0.353
QT2	0.427	0.366	0.310	0.313	0.802	0.295
QT4	0.439	0.355	0.268	0.292	0.779	0.218
QT5	0.514	0.352	0.429	0.409	0.697	0.353
SQP1	0.440	0.577	0.309	0.540	0.430	0.660
SQP2	0.573	0.567	0.590	0.611	0.343	0.808
SQP3	0.474	0.476	0.510	0.590	0.245	0.749
SQP4	0.468	0.489	0.525	0.576	0.232	0.792
SQP5	0.557	0.428	0.537	0.603	0.256	0.719
SQP6	0.341	0.353	0.326	0.370	0.176	0.541

It can be easily seen in the table the factor loading mostly are above the threshold of 0.7 except three items L4 (0.595), QT5 (0.697) and SQP6 (0.541). It shows the items were highly consistent in measuring the underlying constructs.

Table 6: Heterotrait-Monotrait Ratio (HTMT)

No.	Latent Variables	1	2	3	4	5	6
1.	Human Resource Utilization						
2.	Information & Analysis	0.709					
3.	Leadership	0.658	0.715				
4.	Quality Management	0.815	0.786	0.767			
5.	Quality Treatment	0.757	0.566	0.529	0.536		
6.	Strategic Quality Planning	0.801	0.807	0.804	**0.914**	0.492	

Heterotrait-Monotrait Ratio (HTMT) depicts the multicollinearity among the latent constructs. The table produces the values of different collinear constructs. After reviewing the tables, we got to know that there is a slight problem of multicollinearity between the variables of quality management-Strategic quality planning. All the other constructs show a good ratio below the threshold of 0.85. Overall the table showing a better picture of the lack of multicollinearity. It meets one of the basic assumptions of causal analysis. The causal analysis was done to have more rigor and reliable results.

Table 7: Outer VIF Values

Items	VIF	Items	VIF
HRU1	2.111	QM2	1.893
HRU2	1.940	QM3	1.816
HRU3	2.412	QM4	1.751
HRU4	1.632	QM5	2.013
HRU5	1.850	QM6	1.968
IA1	2.124	QM7	1.641
IA2	2.611	QT1	1.759
IA3	2.863	QT2	1.906
IA4	2.110	QT4	1.579
IA5	1.994	QT5	1.252
IA6	1.715	SQP1	1.351
L1	1.627	SQP2	1.874
L2	1.667	SQP3	1.672
L3	2.172	SQP4	1.882

Items	VIF	Items	VIF
L4	1.356	SQP5	1.518
L5	1.742	SQP6	1.279
QM1	1.924		

Variance inflation factors (VIF) values are the measures of collinearity among the latent variables in the model. The above tables indicated that the maximum VIF value is 2.863 for code statement of IA3 in the questionnaires which is below the threshold of 10 for collinearity. There has been no indication of the presence of collinearity in the data. The model is fit to be analyzed further.

Table 8: Inner VIF Values

		1	2	3	4	5	6
1.	Human Resource Utilization					2.027	
2.	Information & Analysis					2.138	
3.	Leadership					1.917	
4.	Quality Management						
5.	Quality Treatment						
6.	Strategic Quality Planning				1.000	2.636	

Inner VIF values are also within the range. The collinearity problem is not present as the values are far below than the threshold of 5.

Structural Model

The research model Fig. 1 showed mixed results as hypothesized.

The model output shows the hypothesis outcome. From the figure, it is drawn that strategic quality planning has a strong influence on quality management within the organization. It enhances patient care, record keeping, staff knowledge sharing and overall efficiency. Because strategy is translated into the courses of actions. The organization makes plans to achieve its goals. Hospitals are aimed at providing better medical services to their patients. Planning about quality enhances the focus of the hospitals to achieve higher efficiency in all aspects of quality management. Other predictors seem to be ineffective in defining the enhanced quality of the treatment to the patients. The reasons might be multifold.

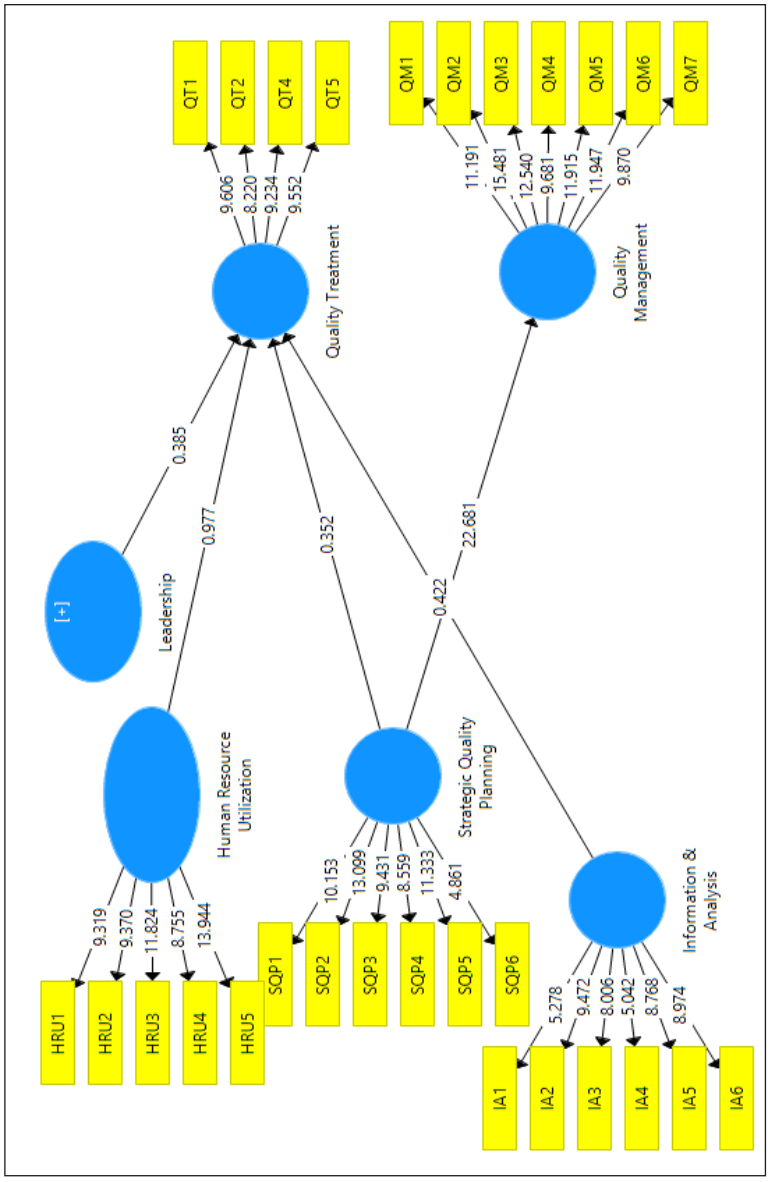

Fig. 2: Research Model Output

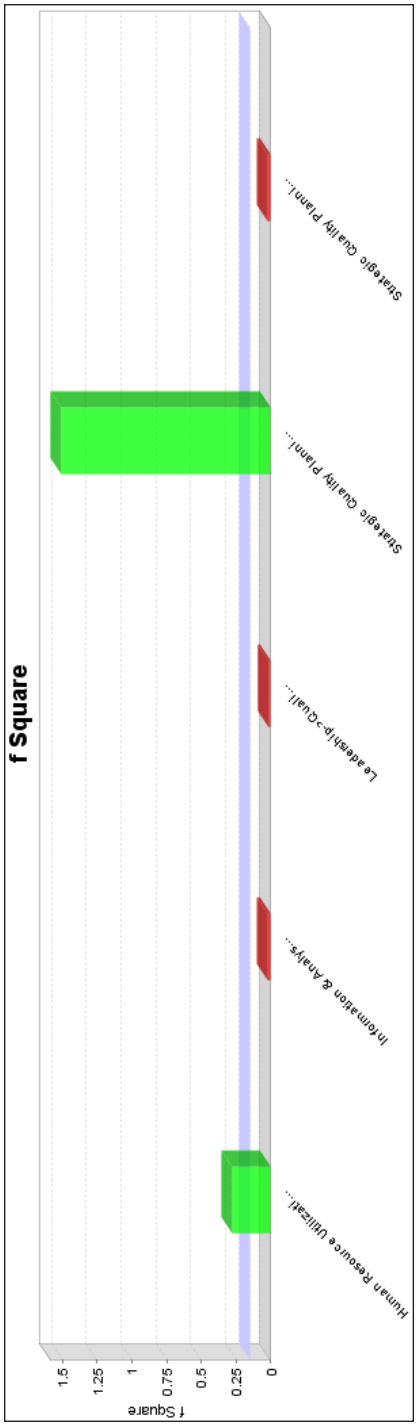

Fig. 3: F Square

Cohen (1988) and Hensslers et al. (2009) described the F square values depicting the effect sizes of the variables. Its values range of 0.02, 0.15 and 0.35 show the small, medium and large effect sizes respectively. As shown in the figure, the f square value is above 0.02 which shows a strong effect size for human resource utilization. Moreover, the effect of strategic quality planning for improvement in treatment quality as well as overall quality management is even stronger. If the hospitals incorporate quality management within the strategic planning the treatment quality will increase.

Table 9

DV	R Square	R Square Adjusted
Quality Management	0.602	0.599
Quality Treatment	0.420	0.405

Predictors: Human Resource Utilization, Information & Analysis, Leadership, Strategic Quality Planning

The table produced R square values of quality management (R2=0.602) and for quality treatment at 0.42. It shows a huge amount of variation has been extracted by the independent variables to dependent variables, it shows that the predictors have a strong influence in defining the quality implementation pattern in the hospitals. The effect of human resource utilization, information and analysis, leadership and strategic quality planning is highly influential. The policymakers to change the quality in the hospitals need to change the intensity of these predictors. On the other side it shows that since the quality is lower in Pakistani hospitals, the administration is less concerned about the predictor. It needs to shift its focus from other constructs to human resource utilization, information and analysis, leadership and strategic quality planning.

Table 10: Total Effects

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Human Resource Utilization -> Quality Treatment	0.947	1.029	0.556	1.702	0.089
Information & Analysis -> Quality Treatment	0.264	0.330	0.439	0.601	0.548

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Leadership -> Quality Treatment	0.292	0.362	0.538	0.544	0.587
Strategic Quality Planning -> Quality Management	0.916	0.921	0.040	22.633	0.000
Strategic Quality Planning -> Quality Treatment	-0.698	-0.887	1.284	0.543	0.587

The above tables show that there is only one hypothesis being substantiated that is strategic quality planning and quality management (t=22.633, P=0.000). The inclusion of quality while making the strategy will enhance the quality management in the hospitals. Framework devised to achieve hospital goals must also incorporate quality implementation methods, procedures and deadlines. Employees at hospitals are key to enhancing quality. The quality information sharing at all level from the bottom line to upper management is necessary. Both managerial and non-managerial staff is an important pillar in improving organizational affairs. The study is helpful in knowing the effects of human resource utilization, leadership, strategic quality planning and information & analysis on quality management and treatment quality in hospitals.

Table 11: Path Coefficients Mean, STDEV, T-Values, P-Values

	Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P-Value
1.	Human Resource Utilization -> Quality Treatment	0.947	1.029	0.556	1.702	0.089
2.	Information & Analysis -> Quality Treatment	0.264	0.330	0.439	0.601	0.548
3.	Leadership -> Quality Treatment	0.292	0.362	0.538	0.544	0.587

	Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P-Value
4.	Strategic Quality Planning -> Quality Management	0.916	0.921	0.040	22.633	0.000
5.	Strategic Quality Planning -> Quality Treatment	-0.698	-0.887	1.284	0.543	0.587

Path coefficient table indicated that human resource utilization has a positive effect on quality treatment. The treatment quality is dependent on the utilization of human resources which may include either doctors or nursing staff or both at once. Most importantly a hospital needs to hire top-class human resource (both medical and paramedical staff). Pakistan the human resource utilization perspective is two folded. Firstly, utilizing talent, skills and potential of the employees. Secondly, utilization may also come in the shape of necessary equipment and medical machinery.

CONCLUSION AND RECOMMENDATIONS

The margin of error is intolerable in Hospitals where the people's lives are at stake. The importance of quality is paramount. Strategic quality planning has been proved as a significant indicator of quality management. It depends on organization planning capability. Mostly incorporation of quality in the strategy is ignored in Pakistani hospitals. If the leadership input quality into the strategy the performance of the hospital will increase. On the other hand, leadership is not proved to be playing a good role in enhancing quality management and treatment quality. The reason might be the ignorance of management about quality management tools and practices. Quality management as a discipline is not much famous among the top management in Pakistan. Human resource utilization is seen to have a mild effect on treatment quality. Doctors practice in private hospitals, in that way they are unable to fully focus on quality treatment on their regular jobs. Thus, the treatment quality is lowering as they don't utilize their full skill set in their primary jobs. Experimental designs or longitudinal studies may be carried out in future to validate the results further.

Limitations of Study

Due to some barriers our research has some limitations. First of all, south Punjab has underdeveloped area of Pakistan that has low personal income because South Punjab peoples has belonged to mostly agricultural community that has less knowledge about satisfaction due to education and they need medical facility with many struggles. In that area there is few well managed hospital and trained staff.

Implementation of Study

Our research study contains the very important aspect that is very necessary in Pakistan to improve the health of the peoples with great attention. In every field customer satisfaction play a very important role in success of that organization. The government of Pakistan should implement that policy to provide quality services to the people of the country.

Future Research Suggestion

There are some topics that should be the next research area in quality management. Future research should be conducted on the income of the customers and quality satisfaction. Qualification of the doctors in hospital and customer satisfaction should be the part of next research topic. A research should be conducted on the qualification of the human resource like para-medical staff and total quality management.

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