# Knowledge Management and Corporate Performance of University of Uyo Teaching Hospital

Samuel Victor Akpan<sup>1</sup>, Ayandele Isaac Ayayinka<sup>1</sup>, Ekwere Raymond Enang<sup>2</sup>\*

<sup>1</sup>Department of Management, Faculty of Business Administration, University of Uyo, Nigeria <sup>2</sup>Department of Accounting, Faculty of Business Administration, University of Uyo, Nigeria \*Corresponding Author

Abstract: Knowledge management and corporate performance studies is on the increase. Tertiary healthcare organizations may find knowledge management rewarding. This study explored the effect of knowledge management on corporate performance at the University of Uyo Teaching Hospital. The study examined the linkage of knowledge management practices with healthcare performance. The study used proportional sampling technique to determine the proportion of clinical staff of University of Uvo Teaching Hospital. The study had a total population of 1,816 staff members with 924 clinical staff. A sample size of 450 used in the study copies of questionnaire were administered to selected clinical staff. The data collected through primary source was analysed using frequencies and multiple-regression model. The finding revealed that knowledge management indicators; knowledge acquisition, knowledge sharing and knowledge transfer showed statistically significant effect on corporate performance indicators; hospital re-admission rate, patients' waiting time and patients' average treatment cost at a P-value < 0.01. Key recommendations of the study were that management of the University of Uyo Teaching Hospital should improve upon knowledge management practices in order to increase the quality of services offered by the institution and that employees sharing of knowledge among groups, units and individual in the hospital should be encouraged to reduce patients' waiting time.

Keywords: Knowledge Management, Corporate Performance, Performance.

## I. INTRODUCTION

The creation, sharing and transferring of knowledge in all organisations, especially the health sector, have become critical factors in their success and efficiency. It becomes highly demanding that managers and administrators of such organizations and institutions must possess the requisite ability to control, monitor and enhance knowledge, creation, sharing and transfer in their organizations towards achieving the set organizational goals. This process is the management of knowledge. Knowledge management is "the creation and development of internal organizational conditions, which bring together all process related to knowledge of reaching the goal of the organization" (Alana, 2012). We can view knowledge management through culture, technology and human resources. These components influence the creation and acquisition of knowledge. They also regulate the sharing and dissemination of knowledge enhancing information. They are important for the transfer and storage of knowledge in any organization.

Acquisition of knowledge can be achieve through learning and study. There is a growing need for individual and groups in an organization to have training and experience. They should consistently develop the knowledge they have gained. Training of health works takes appreciable time, but the dynamic nature of the work environment requires an increase in such knowledge. We can see the transfer of knowledge as a conveyance of knowledge from one place, person and ownership to another. In this line of thought, knowledge comes from a source with an intended destination which involves two or more parties. Unlike transfer of property, in knowledge transfer, the party giving out knowledge grows in knowledge rather than lose it, alongside the person receiving the knowledge. Knowledge transfer leads to knowledge growth and is the sustainable strategy towards increasing organizational knowledge and technical know-how for a rewarding organizational performance.

Knowledge acquisition, transfer or sharing requires the willingness of an individual, teams or unit is to work with each other and share knowledge for their mutual benefits. Regrettably, certain individual consider the sharing of knowledge as a loss of them when giving out knowledge and the competitive nature of work environment makes the sharing and transferring of knowledge difficult since employees seek to prove their efficiency. Organizations' recruitment process creates a perspective that employees hired and kept in employment based on their individual knowledge prowess in all other considerations. This posture makes it difficult to manage the acquisition, sharing and transferring of knowledge.

The ability to gain, share, and transfer knowledge among individuals and groups in an organization is a critical success factor. This factor is also good in sharing and transferring of knowledge management contributes to organizational performance (Coleman, 1999). The quality of health service provided by any health institution is the major determinant of its performance. The University of Uyo Teaching Hospital is a training facility for undergraduate and graduate students. It also provides healthcare services to the public while training students. In carrying out these functions, has found her heavy dependence on knowledge as its major driver towards the attainment of its goals and objectives.

#### Statement of Problem

Knowledge sharing among highly intelligent person is usually very difficult and at times impossible because some individual or groups in an organization hide knowledge gained. This makes knowledge management in such a situation difficult. Organizations makes matters worse by making individual feel they keep them at work because of their individualistic and exceptional knowledge. This unconsciously creates selfishness and resistance to freely sharing and transferring of knowledge. It also creates fierce and negative competition among employees in an organization. It results in individualistic and anti-group behaviour to sharing or transferring knowledge among individuals and groups in organization. The University of Uyo Teaching Hospital faces this type of situation. In this circumstance, the knowledge management practice is hard.

The University of Uyo Teaching Hospital like any such organization is in a social system. She interacts with other organizations, the public and the society. Being a knowledge based-institution, individuals, groups, organizations and society assess her based on perceived knowledge based on performance indicators: patients' readmission rate, waiting time and average treatment cost. While there is competition among individuals and groups in the organization, there are technological changes in the society. This alteration affects knowledge shared and transferred in the organization. It creates the need to gain and share knowledge more often to keep pace with the changing environmental factors.

Knowledge management capability is the major driver and determinant of quality of service in any organization. We expect the quality of healthcare service delivered by the University of Uyo Teaching Hospital to be in the superlative. It attracts intelligent and highly skilled individuals, teams, and groups who compete to show their proficiency. The competition makes these individuals self-centered, sharing less knowledge. Yet managers of this organization must enhance the acquisition, sharing and transferring of knowledge in the organization to achieve high-quality healthcare service delivery. It is imperative to examine the effect of knowledge management practices and the organizational performance in healthcare institution such as the University of Uyo Teaching Hospital, Uyo.

## Objectives of the Study

The main objective of the study was to examine the effect of knowledge management on the performance of University of Uyo Teaching Hospital Uyo. Specifically, the following objectives were set for this study to:

- i. Examine the effect of Knowledge Acquisition (KA) on re-admission rate (HRR) at University of Uyo Teaching Hospital, Uyo.
- ii. Assess the relationship between Knowledge Sharing (KS) and patient wait-time (PWT) at University of Uyo Teaching Hospital, Uyo.

- iii. Examine the effect of Knowledge Transfer (KT) and Average Treatment Cost at University of Uyo Teaching Hospital, Uyo.
- iv. Establish the relationship between Knowledge acquisition, knowledge sharing, knowledge transfer and re-admission rate and average treatment cost.

#### Research Ouestions

The underlisted research questions were set in order to meet the objectives of the study. They are:

- i. What is the effect of Knowledge Acquisition (KA) on re-admission rate (HRR) at University of Uyo Teaching Hospital, Uyo?
- ii. What is the effect of Knowledge Sharing (KS) and Patient Wait-Time (PWT) at University of Uyo Teaching Hospital, Uyo?
- iii. What is the effect of Knowledge Transfer (KT) have on Average Treatment Cost (ATC) at University of Uyo Teaching Hospital, Uyo?
- iv. What is the relationship between knowledge acquisition, knowledge sharing, knowledge transfer and re-admission rate and average treatment cost?

## Research Hypotheses

- $H_{\text{ol:}}$  There is no significant effect of Knowledge Acquisition (KA) on re-admission rate (HRR) at University of Uyo Teaching Hospital.
- H<sub>02:</sub> There is no significant effect of Knowledge Sharing (KS) on Patient Wait-Time (PWT) at University of Uyo Teaching Hospital.
- $H_{o3:}$  There is no significant effect of Knowledge Transfer (KT) have on Average Treatment Cost (ATC) at University of Uyo Teaching Hospital.
- H<sub>o4:</sub> There is no significant effect of knowledge acquisition, knowledge sharing, knowledge transfer and re-admission rate and average treatment cost.

#### II. REVIEW OF RELATED LITERATURE

#### Concept of Knowledge Management

Megan and Jon (2007) posit that knowledge management is the process through which organizations generate value from their intellectual's and posit knowledge based assets. It is the systematic management of an organization's knowledge assets for the purpose of creating value and meeting tactical and strategic requirements, it consists of the initiative, process, strategies and systems that sustain and enhance the storage, assessment, sharing, retirement, and creation of knowledge (Alana, 2012).

Knowledge management is a conscious effort to get the right knowledge to the right people at the right time so that it can be shared and put into action (Aziri, Veseli and Ibraimi, 2013). Nnabuife (2009) argued that "since people have different types of knowledge from different backgrounds and fields of study, and, of different quality and form, information gathering process is seen as very important to decision

quality". It is also worthy of note that information sourced internally is usually cheaper (Nnabuife, 2009). Robbins, Judge and Sanghi (2007) state that knowledge management is the process of organizing and distributing an organization's collective wisdom so that the right information gets to the right people at the right place. When done properly, knowledge management provides an organization with both a competitive edge and improves organizational performance because it makes its employees smarter (Robbins *et al.*, 2007).

Holtshouse (1998) proposed that knowledge is a kind of flow that can transfer knowledge between knowledge supplier and knowledge demander. In addition, Petrashi (1996) supported that knowledge management is getting the right knowledge to the right people at the right time so they can make the best decisions. Knowledge management is an organized, systematic business optimization strategy that selects, collects, stores, organizes, packages, and communicates information that consider vital to the business of a company in a manner that improve employee performance and corporate competiveness (Bergeron, 2003).

## Concept of Knowledge

Blacker (1993) defines knowledge as taking five distinct forms: embodied, embedded, embrained, uncultured, and encoded. The author defines embodied knowledge as knowledge that is gained through training of the body to perform a task; Strati (2007) and Yaklet (2010) point out that it is impossible to totally disembody this knowledge from people. Embedded knowledge is a knowledge that is found in routines and systems. Organizational common tasks, routines or the common ways people go about their jobs, can hold embedded knowledge, as the routines facilitate learning amongst the employees that go beyond their job tasks. Hislop (2013) corroborates this fact by stating that Knowles is embedded, and inseparable from, practices. That, knowledge that is embedded in work practices is simultaneously embodied by the workers, who carry out these practices (Strati, 2007; Yakhleft, 2010).

Embrained is defined as the knowledge that a person can possess, but has difficult expressing in words or sharing with other. It is further described as a knowledge that one cannot easily write down, talk about with others, or represent with pictures or other tools. It is gained through experience over time and may reflect one's perceptions, opinions, values and morals. Encultured knowledge is described as a set of knowledge that is shared among groups of people who share a similar environment or culture, such as what is accepted, what actions and opinions are considered normal, and what behaviours are expected of people. Encoded knowledge is a form of knowledge that can be easily written down, expressed in words or diagrams, and is transferrable through multiple channels and means. Procedure manuals, guidelines, process diagram, flowcharts, recipes and instructions are all examples of encoded knowledge, because they are encoded in a physical form that is understandable by a lot of people.

Therefore, in organizations, it can be said that organizational knowledge is embodied and embrained in the staff, embedded in routines/common tasks, encultured among the staff, and encoded in manual, guidelines and procedures. Davenport and Prusak (2000) says that in organizations, knowledge becomes embedded not only in documents or repositories, but also in organizational routines, processes practices, norms and cultures.

Knowledge can be distinguished in two different types Polanyi (1966, 1967); Nonaka (1995); Nonaka and Takeuchi (1995) described knowledge as existing in two dimensions - tacit and explicit knowledge. In essence, knowledge is most commonly categorized as either explicit (coded) or tacit (that which is in people's heads). Tacit knowledge is the personal and context specific, knowledge of a person that resides in the human mind, behaviour, and perception (Fuffy, 2000). It evolves from people's interaction and requires skill and practice. Tacit knowledge is highly personal (held within the holder), subjective, difficult to formalize, articulate and communicate fully, experience based, contextualized, job specific transferred through conversation or narrative, not captured by formal education or training and may even be subconscious but capable of becoming explicit knowledge (Nonaka and Takeuchi, 1995; Hislop, 2013). It is the type of knowledge that is used mostly by organizational members in the performance of duties. Tacit knowledge is hard to verbalize because it is expressed through action a based skills and cannot be reduced to rules and recipes. It is deeply rooted in action, procedures, commitment, ideals, values and it can only be indirectly accessed (Baloh et al., 2011).

Explicit knowledge in contrast is formal and systematic, can be codified, collected, stored, and disseminated. It is not bound to a person and has primarily the character of data. Explicit knowledge exists at the epistemological dimension where explication is possible using written or coded formats (Nonaka, 1994). Explicit knowledge is documented and public; structured, fixed content, externalized and conscious (Duffy, 2000). Explicit knowledge is what can be captured and shared through information technology. It can be codified into formal information that comes in tangible forms as written books, documents, manuals, white papers, guidelines, blueprints, technical specification, scientific formulas, databases organizational designs and policy manual.

# Knowledge Acquisition

Knowledge acquisition is the reproduction, and improvement of knowledge capabilities especially in a tertiary healthcare facility (Goh, 2002). Knowledge acquisition deals with the processes of creating, generating developing, building and constructing knowledge internally. The accumulation of skills and techniques for addressing healthcare needs and building capabilities for this purpose is termed knowledge and the process of this accumulative is seen as acquisition. It is a process to extract structure and to

organizes expert knowledge into a complex set that encourages new knowledge, flexible to change (Grant, 1996).

#### Knowledge Sharing

The re-use and regeneration of knowledge in individuals, groups and organization is knowledge sharing. Knowledge is increased by sharing (Foss, 1996). Knowledge sharing has a positive impact on the performance of the organization (Rossett, 2003). It serves as a vehicle for effective knowledge management practice in organizations (Farrog, 2017). A reward system that encourages knowledge sharing enhances participation be the most intelligent and productive employees.

#### Knowledge Transfer

Organizations create competitive advantage by mastering knowledge and knowledge transfers (Parikh, 2001). Knowledge transfer involves the forwarding of knowledge to individuals, groups and units in an organization. Knowledge management also enhances the transition of knowledge from individuals, groups and units in an organization over a long period of time. It is the engine room for preserving organizational culture.

#### Re-admission Rate

There are diverse opinions on the effect of hospital re-admission rate on the healthcare organization performance. Some scholars argue that hospital re-admission rate shows the level of inefficiency due to the poor treatment of patients, while others argue that patients who have medical condition are comfortable to be re-admitted into medial facilities they are sure of getting adequate care and supports (Luay and Serban, 2002). The quality of service a patient obtains at first admission has a greater influence on the repatronage of the facility for subsequent times.

## Patient's Waiting-Time

Timely attention to patients is a key objective in hospital management; short waiting time and a positive experience represent important drivers of patients' satisfaction (Strati, 2007). It is believed that hospitals with short waiting time will be rated high in terms of performance by the patient and this is made possible by the knowledge and skill stock of the organization at large.

# Average Treatment Cost

The cost incurred by a patient at a healthcare facility compared to any other healthcare facility has a direct effect on the patronage or repatronage of the patient. Patients as rational beings would want to patronize healthcare facilities whose cost of treatment is considerably low (value base), compare to anyone elsewhere (cost based). Some patients attached effectiveness and efficiency of health facility to low cost incurred by using the facility. Meanwhile, what is regarded as a fair price for healthcare services is seen as lack of knowledgeable, qualified and competent health personnel by some patients (Choo, 2002).

#### III. THEORETICAL FRAMEWORK

## Knowledge Based Theory

The relevant theory that helps significantly towards realizing the important role of knowledge management is the knowledge-based theory developed by Gran (1996). He argues that the source of competitive advantage in dynamic business environment is not the knowledge that is repository to the organization, because the value of such knowledge erodes quickly due to obsolesce and imitation. Rather, sustained competitive advantage is determined by nonproprietary knowledge in the form of tacit individual knowledge. Tacit knowledge can form the basis of competitive advantage because it is both unique and relatively immobile. Yet, because that knowledge is possessed by individuals and not the organization, a crucial element of competitive advantage is the ability to integrate the specialized and tacit knowledge of individuals. The main idea of the knowledge-based theory of the form of the firm is that organizations exist in the way that they do because of their ability to manage knowledge more efficiently than is possible under other type of organizational structures. In other words, organizations social entities that use and store internal knowledge, competencies and capabilities that are vital for the firm's survival, growth and success (Hakanson, 2010). The theory assumes that organizations are all heterogeneous knowledge-bearing entities that apply knowledge to the production of their goods and service (Foss, 1996). Firms are able to organize the way they do because they are depositories of productive knowledge. Thus, knowledge can differentiate an organization from another.

## Empirical Review of Literature

Wasim, Muhammad and Nabila (2015) investigated the impact of knowledge sharing (KS) practices on banks' performance in the presence of mediating mechanism of system-oriented strategy and human oriented strategy. Survey method was used to collect the data from 810 middle level managers from a sample of 42 banks. Structural equation model (SEM) and confirmatory factor analysis (CFA) were employed to evaluate the overall fitness of the model. Results of the study indicated that knowledge sharing practices are not significantly related with human oriented strategy. Furthermore, findings of the study shed light that system and human oriented strategy significantly mediates the relationship for both explicit and tacit KS driven performance, thus encouraging the managers to emphasize more on KM strategies because it helps them to align the KM initiatives for better sharing of knowledge which may lead to sustainable performance.

Nikolaos, Dimitrios and Georgios (2011) identified the critical success factors or enablers that determine the KM effectiveness within organizations, which in turn influence the total performance of the firm. Based on existing frameworks and models, this study outlines the five most important factors that are believed to be critical for an effective KM implementation. This paper also investigated the effect of

knowledge management effectiveness on firm performance. The proposed research model was tested via an online survey sent to 280 medium and large size enterprises, randomly selected, all over Greece; from those only 109 answered the questionnaire correctly. The results of the study indicated there was an impact of different enablers on the KM successful implementation. Furthermore, the result showed that effectiveness of KM had an effect on firm performance.

John and Ohimai (2015) investigated if there is a relationship between knowledge management performance and if there is variation in knowledge management effectiveness among Nigerian universities. The paper examined approved universities that have gone through Nigerian Universities Commission (NUC) accreditation process in Nigeria and selected six (6) universities which were classified into two federal universities, two state universities and two private universities based on ownership and age criteria. Random sampling and convenience sampling were used to select the various universities. These six universities ha staff strength of 13,822. Questionnaire were then distributed to 389 respondents on the basis of the staff strength of each university. Correlations, and regression analysis and Analysis of Variance (ANOVA) were used to analyse the data. It was found that; variations in knowledge management practices led to differences in organization performance; and knowledge management was effective in all universities except Benson Idahosa University. The paper recommended the provision of communication facilities, full scale knowledge audit, provision of library facilities, massive training of universities' current work force and continuous upgrading of technology.

Annette and Trevor (2011) examined knowledge management and organizational performance. Their study used survey data from one hundred and eighty nine senior and middle managers and structural equitation modeling for data analysis; using a Resource Based View (RBV), the finding indicated that some knowledge resources such as structure of organization, application of knowledge are directly associated with organizational performance, while others such as technology, knowledge conversion did not have significant relationship to performance.

Kharabsheh, Magableh and Sawadha (2012) studied knowledge management practices and its impact on organizational performance in pharmaceutical firms in Jordan. They argue about the importance of knowledge management as a valuable instrument in improving performance. They also emphasis on effectiveness and ability of an organizational to implement knowledge based activities will determine the development and sustainability of its competitive advantage. The study uses survey questionnaire and multiple regression method for data analysis. A sample of thirteen pharmaceutical firms was used. The findings of the study reported a significant and positive association between Km practices and organizational performance.

Dawood and Morteza (2012) investigated knowledge management capabilities and SMEs organizational performance. The sample was drawn from thirty small and medium enterprises with a survey questionnaire as a study instrument and regression methods for the data analysis. The result of the study indicated that all three factors of KM capabilities have a significant and positive association with SME performance.

In the same vein, Emadzade, Mashayekhi and Abdar (2012) empirically studied knowledge management capabilities and organizational performance in Isfahan, Iran. Survey questionnaire and regression method is used for data analysis. Two hundred and forty five small business owners were selected from eighty six small firms, adopting resource based view theory. The result shows a partial association between the two constructs.

Wang, Lee, Wu, Chang and Wei (2012) examined the influence of knowledge management and brand equity on the marketing performance in a Japanese automaker's branch in Taiwan. A quantitative survey using questionnaire was carried out with structural equation modeling as a method for data analysis. The findings of the study indicated strong linkage between KM and firm performance.

Zwain *et al.* (2012) conducted a study that focused on the impact of knowledge management processes and academic performance in Iraqi higher education institutions. The study was based on a survey design and cross-sectional. The hypotheses were tested through correlation and regression analyses. The result suggested that Iraqi higher education institutions can benefit from knowledge management processes. The study also suggested that decision-makers should acquire in-depth knowledge about the impact of knowledge management processes in Iraqi higher education institution context.

Abdel, Gawater and Mohamed (2012) investigated the role of knowledge management in enhancing organizational performance in some Egyptian organizations, using a questionnaire to collect the required information. The result shows that all elements of knowledge management capabilities have a positive significant relationship with all measures of the performance at 1% level of significance; it means that there is a great correlation between knowledge management capabilities and organizational performance.

## IV. METHODOLOGY

This study adopted survey research design. Data in this study were derived from the structured questionnaire administered at University of Uyo Teaching Hospital to the workers. Thus, 150 copies of the questionnaire were administered to the staff of UUTH (respondents). The instrument used in the study was been validated through technical scrutiny. Reliability of the instrument used for the study was established by administering 20 copies of the questionnaire to the employees that were not part of the study.

Variables

The following variable were used for the study:

QS = Quality of Service
KA = Knowledge Acquisition
KS = Knowledge Sharing
KT = Knowledge Transfer

#### **Model Specification**

QS = f (KA, KS, KT) - - - (1)  
OS = 
$$\beta_{0+}\beta_{1-}KA + \beta_{2} - KS + \beta_{3} - KT$$
 - (2)

#### V. DATA ANALYSIS AND DISCUSSION

#### Hypothesis One

 $H_{o1}$ : There is no significant effect of Knowledge Acquisition (KA) on Hospital Re-admission Rate (HRR) at University of Uyo Teaching Hospital, Uyo.

Table 1: Linear Regression Result

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688ª	.483	.480	1.40632

#### Model Goodness of Fita

Model	Sum of Squares	Df	Mean square	F	Sig
Regression	171.348	1	171348	236.076	.001
Residual	791.099	400	1.978		
Total	862.448	401			

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardi zed Coefficien ts	4	Sia.
Model	В	Std. Error	Beta	t	Sig.
1 (Constant	14.446	.709		20.37 8	.000
Customer orientation	.239	.040	-288	- 6.006	.000

#### a. Dependent Variable HRR

A simple linear regression model was used to test the null hypothesis. The R<sup>2</sup> showed a value of 0.483. This implies that 48.3 percent of the changes in Knowledge Acquisition (KA) brings about significant reduction in Hospital Readmission Rate (HRR) at University of Uyo Teaching Hospital, Uyo. The beta score showed an inverse relationship between the variables which implies that increase in knowledge acquisition will lead to a reduction in the hospital re-admission rate for the same cause of treatment. This shows that increase in knowledge acquisition will reduce the number of patients who come back to the hospital with the same ailment which implies improvement in the quality of services

offered by the hospital. Thus, the null hypothesis that there is no significant effect of Knowledge Acquisition (KA) on Hospital Re-admission Rate (HRR) at University of Uyo Teaching Hospital, Uyo is hereby rejected.

Hypothesis Two

**H**<sub>02</sub>: There is no significant effect of Knowledge Sharing (KS) on patient wait time (PWT) at University of Uyo Teaching Hospital, Uyo.

Table 2 Linear Regression Result

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.650a	.483	.421	.80720

#### Model Goodness of Fit<sup>a</sup>

Model	Sum of Squares	Df	Mean square	F	Sig
Regression	190.882	1	190.882	292.953	.001
Residual	260.631	400	.652		
Total	451.512	401			

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardi zed Coefficien ts	t	Sig.
Model	В	Std. Error	Beta	ı	Sig.
1 (Constant	2.590	.472		5.491	.000
Customer orientation	.391	.023	.650	17.11 6	.000

#### a. Dependent Variable PWT

A simple linear regression model was used to test the null hypothesis. The R<sup>2</sup> showed a value of 0.423. This implies that 42.3 present of the changes in Knowledge Sharing (KS) can affect 42.3 percent of the changes Patient's Waiting Time (PWT) at University of Uyo Teaching Hospital, Uyo. The model showed a goodness of fit at p-value <0.01, which implies that there a linear relationship between knowledge sharing and patients' waiting time Beta score showed a positive relationship between the variables. This is as a result of the positive posture that questions in the questionnaire revealed when respondents agreed that a positive knowledge attitude will lead to an improvement in the patients' waiting time. Thus, the null hypothesis that there is no significant effect of Knowledge Sharing (KS) on patient wait-time (PWT) at University of Uyo Teaching Hospital, Uyo is hereby rejected.

H<sub>03</sub>: There is no significant effect of Knowledge Transfer (KT) on Average Treatment Cost at University of Uyo Teaching Hospital, Uyo.

Table 3 Linear Regression Result

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.411a	1.69	.167	1.11802

Model Goodness of Fita

Model	Sum of Squares	Df	Mean square	F	Sig
Regression	101.636	1	101.636	81.311	.001
Residual	499.988	400	1.250		
Total	601.624	401			

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardi zed Coefficien ts		St.	
Model	В	Std. Error	Beta	t	Sig.	
1 (Constant	1.760	.501		3.512	.000	
Customer orientation	.277	.031	.411	9.017	.000	

#### a. Dependent Variable ATC

A simple linear regression model as used in determining the effect of Knowledge transfer on average treatment of patient at University of Uyo Teaching Hospital, Uyo. The R score is .411 but the R<sup>2</sup>.169 percent of the changes in Knowledge Transfers will affect 16.9 percent of changes in patients' average treatment cost. Thought he model showed statistical significant with knowledge transfer, there is a weak relationship since there are a lot more things that can explain the changes in patients' average treatment cost other than knowledge transfer. The model showed statistical significance at 0.000 (p-value 1), therefore the bull hypothesis that there is no significant effect of Knowledge transfer (KT) on Average Treatment Cost (ATC) at University of Uyo Teaching Hospital, Uyo is thus rejected.

Table 4. Multiple Linear Regression Result

## Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.762ª	.580	.577	1.27181

Model Goodness of Fita

Model	Sum of Squares	Df	Mean square	F	Sig
Regression	889.827	3	296.609	183.374	.001
Residual	643.768	398	1.618		
Total	1533.595	401			

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardi zed Coefficien ts	t	Çi.
Model	В	Std. Error	Beta	ι	Sig.
1 (Constant)	8.402	.904		9.293	.000
KA	.280	.046	.253	6.097	.000
KS	.109	.047	.099	2.350	0.19
KT	.709	036	.658	19.95 2	.000

#### a. Dependent Variable QS

The R2 result showed 0.580 which implies that 58.0 percent of the changes in three variables can be to explain 58.0 percent of the changes in quality of service offered at the University of Uyo Teaching Hospital, Uyo. The goodness of fit showed that the variables have significant linear relationship with quality of services (p-value> 0,01). The variables showed statistically significance with quality of service (Knowledge Acquisition and Knowledge Transfer at p-value<0.01). knowledge Sharing was not statistically significant with quality of service.

# Hypothesis Four

H<sub>04</sub>: There is no significant effect of Knowledge acquisition, knowledge sharing, knowledge transfer and Re-admission rate and Average Treatment Cost.

		KA	KS	KT	HRR	PWT	ATC	QS
Spearm an's'	KA	1.000						
rho	KS	.690**	1.00					
	KT	.227**	.397 **	1.00				
	HRR	278**	.314 **	.357	1.00			
	PWT	.989**	.702 **	.222	.316	1.00		
	ATC	.095	.608 **	.520	.129	.069	1.00	
	QS	.388**	.475 **	.763 **	.584 **	.358	.605 **	1.0 00

<sup>\*\*</sup> correlation is significant at the 0.01 level (2-tailed).

The variables considered for the correlation were significant at 0.01 which is an indication that p-value was less than 0.01. Knowledge sharing showed 69.0 percent relationship with Knowledge Sharing which is a clear indication that analysis of the data se agree with the natural assertion that you cannot share what you do not have. Hospital Re-admission Rate (HRR) showed inverse relationship with Knowledge Acquisition (KA). Knowledge Sharing (KS) and Patient Waiting Time (PWT), which i the desire of more and more patients to access health care at the hospital. A reduction in patients waiting will certainly increase patronage (HRR). PWT shows strong relationship with KA and KS which

implies that as knowledge is required and shared, there is reduction in patients waiting time. The correlation being statistically significant shows that there hypothesis that there is no significant effect of Knowledge acquisition, Knowledge sharing, knowledge transfer and Re-admission rate and Average Treatment Cost is hereby rejected.

#### VI. DISCUSSION OF FINDINGS

The findings from this study show that knowledge management indicators; knowledge acquisition, knowledge sharing and knowledge transfer had statistically effect on Hospital Re-admission Rate (HRR) Patients' Waiting Time (PWT), Patients' Average Treatment Cost (ATC) at p-value <0.10. Hospital Re-admission Rate (HRR), PWT and ATC are indicators of the quality of service offered by a hospital as specified by World Health Organization. The indicator of knowledge management was seen to be statistically significant (p<0.01) with quality of service in a multiple linear regression analysis. Considering the indicators individually, only two indicators were statistically significant to quality of service; they are knowledge acquisition and knowledge sharing. The result also revealed that all the variables used in the study were in correlation with one another at p-value<0.01.

result also indicated that knowledge management has a significant effect on the corporate performance (quality of service as the proxy) of the University of Uyo Teaching Hospital, Uyo. This is in agreement with the opinions of Wasin, Muhammad, and Nabila, (2015). Knowledge Sharing showed an independent statistical significant effect on Patients' waiting time used as a measure of the quality of service offered by University of Uyo Teaching Hospital. His is in agreement with the findings of Wasin Muhammad, and Nabila (2015), who found out in their study that knowledge sharing practices carried out by health institution have significant positive effect on their performance. The findings also reflect the assertion, as 65 percent of the changes in patients' waiting time was influenced by 65 percent of the changes in knowledge sharing. The sharing of knowledge among practitioners in health institutions has the capacity to increase the knowledge base and efficiency of such institution.

Knowledge acquisition was seen to be statistically significant to Hospital Re-admission Rate, though there are various perspectives of this assessment where some schools of thoughts believe the re-admission rate if for related ailment is a reflection of the fact that the patients were not properly treated. Others argue that it could be a form of assurance that the patients have confidence in the process of treatment, yet some scholars argue that there is interrelationship between these two arguments such as satisfied patients come back, bring others and increase hospital admission and readmission rate. Amidst these arguments, it was confirmed that knowledge acquisition promote continuous performance, and that hospital re-admission rate remains a measure of patient' satisfaction because dissatisfied patients will not was to be readmitted in hospital they do not have confidence in (Martin,

2012; Kharabsheh, Magableh and Sawadha, 2012). The result of this study tallies with the last statement as 41.1 percent of the changes in knowledge transfer influences average treatment cost of patients' visiting University of Uyo Teaching Hospital.

Knowledge Acquisition and Knowledge Transfer show statistical significant effect on quality of service in a multiple regression model which is line with the study of Martins (2012) who asserted that there is strong positive relationship between knowledge acquisition and quality of service offered by health institution. There can be no knowledge transfer except proper knowledge had been acquired, therefore, there is an inter-relationship between knowledge acquisition and knowledge transfer and this interaction showed in the multiple regression analyses where these two element were statistically significant.

Knowledge acquisition showed a significant relationship with knowledge sharing at 0.69 with p – value < 0.01, this implies that 69 percent of the changes in Knowledge acquisition is a s a result of 699 percent of the changes occurring in knowledge sharing in the organization under study. There is interrelationship between knowledge acquisition and knowledge, also his existing knowledge through experience and understanding. The combined effects of practicing knowledge acquisition, sharing and transfer produces a significant positive result. This can be seen from the multiple regression results in which three variables were regressed against a transformed variable – quality of service. The quality of service was obtained from adding the quality of service indicators of HRR, PWT and ATC. The regression result showed that 76.2 percent of the changes in knowledge acquisition, sharing and transfer influenced 76.2 percent of the changes in the quality of service offered by University of Uyo Teaching Hospital. This implies that when reliable knowledge is acquire, shared and transferred in an organization the performance of such institution in terms of quality of service offered is bond to increase.

#### VII. CONCLUSION

From the various findings of this study, we concluded that knowledge management practices have a significant effect on the corporate performance of University of iuYO Teaching Hospital (UUTH). University of Uyo Teaching Hospital (UUTH) being a tertiary healthcare facility is a driven by the knowledge of individual, a group in the organization towards the attainment of its corporate objectives and goals. Knowledge acquisition has effect on the rate at which patients repeat patronage of the services offered by a health institution like UUTH. There was a significant effect of the knowledge based of the organization and the Hospital Readmission Rate. The knowledge acquired by individuals and groups in the organization enable to offer high quality services that gives the patients fewer choices whenever they (patients) require such service in the nearest possible future. Sharing knowledge among professionals working in University of Uyo Teaching Hospital is seen to have significantly affected the

time in which patients wait in the hospital before and after being attended to, reducing patients waiting time increases the quality of service offered by the hospital and gives the patients the confidence that he/she must have been well treated. Knowledge transfer among individuals and groups reduce unnecessary processes, since it brings everyone on the same page as to what is required at a time, this in turn has impact on the average treatment cost of the patients, since shared information for instance reduce repeated request. In depth knowledge about a process is the key element for cost reduction.

#### VIII. RECOMMENDATIONS

The following recommendations were made based on the findings of the study:

- University of Uyo Teaching Hospital should improve on their knowledge management practices in order to increase the quality of services offered by the institution.
- ii. Management of the institution should encourage individuals and groups to acquire more knowledge at all times since this will lead to an increased in hospital re-admission rate and revenue for the hospital.
- iii. Management should also encourage the sharing of knowledge among groups, units and individuals in the hospital to reduce patients' waiting time.
- iv. Knowledge transfer among units, departments, and groups should be encouraged in order to reduce patients' average treatment cost.
- Workers in the hospital should always seek out methods that can enhance their knowledge management skills.

#### **REFERENCES**

- Abdel, N., Gawaher, H. and Mohamad, M. (2012). The role of knowledge management in enhancing organizational performance. Information Engineering and Electronic Business Journals, 18: 27

  – 35
- [2] Alana, F. (2012). Knowledge management definition. Available at http://www/research/entrepreneurship. Retrieve 26th August, 2014.
- [3] Aziri, B., Veseli, N. and Ibrahim, S. (2013). Human resources and knowledge management in active citizenship. Journal of Knowledge Management and Innovation, p.1037 – 1043.
- [4] Baloh, P., Desouza, K. and Paguetfe, S. (2011). The concept of knowledge. New York Neal – Schuman Publishers.
- [5] Bergoron, B. (2003). Essential of knowledge management. New Jessy John Wilen & Sons, Inc.
- [6] Blacker, F. (1993). Knowledge, knowledge work and organizations: An overview and interpretation. Organization Studies, 116(6): 1021 – 1046.
- [7] Choo, C. (200) Knowledge management. Encyclopedia of Communication and Information, p.501 – 506.
- [8] Colemon, P. (1999). The current state of knowledge management in Liebowitz. J. CRC Press, Boca Raton.

- [9] Duffy, J. (2000). Knowledge management. Information Management Journal, 34(1): 64 – 67.
- [10] Emadzade, M. Mashayeklu, B. and Abdar, E. (2012) Knowledge management capabilities and organizational performance. Interdisciplinary Journal of Contemporary Research in Business, 3(11): 781 – 790.
- [11] Foss, N. (1996). Knowledge-based approaches to the theory of the firm: Some critical comments organizational science, 7:5, September – October.
- [12] Goh, S. (2002). Managing effective knowledge transfer: Framework and some practices implications. Journal of Knowledge Management, 6(6): 23 – 30.
- [13] Grant, R. (1996). Toward a knowledge-based theory of the firm strategic management. Journal of Management, 17(10).
- [14] Hislop, O. (2013). Knowledge management in organization: A critical introduction. UK Oxford University Press.
- [15] Hosthouse, D. (1998). Knowledge research issues: California Management. Review Journal, 40(3): 277 – 80.
- [16] Kharabsheh, R., Magableh, I. and Sawadha, S. (2012). Knowledge management practices and its impact on organizational performance in Pharmaceutical firms. European Journal of Economic, Finance and Administrative Sciences, 148, 6 – 15.
- [17] Luay, J. and Serban, A. (2002). Overview of knowledge management. New Director for Institution Research Journal, 2(2).
- [18] Martin, F. (2012). Knowledge acquisition strategies and company performance in Tonny High Technology Companies. British Journal of Management, 23(23): 325 345.
- [19] Megan, M. and Jon, S. (2007). Knowledge management definition and solution. Available at http://www.Cio.com/Article/243927/EnterpriseSoftware. Retreived 26<sup>th</sup> August, 2014.
- [20] Nikolaos, T. Dimitrios, M. and Georgious, T. (2011). Knowledge management enabler factors and firm performance: An empirical research of the Greek medium and large firms. European Research Studies Journal, 2(2): 97 – 134.
- [21] Nnabuife, K. (2009). Organizational behaviour and Management Theory. Rex-Charles and Patrick limited, book smith house, Harmony Place Nimo, Press, Anambra State.
- [22] Nonaka, I. (1995). A dynamic theory of organizational knowledge creation. Organizational Science Journal, 5(1): 14 – 37.
- [23] Nonaka, L. and Takeuchis, H. (1995). The Knowledge Creating Company. New York: Oxford University Press.
- [24] Parikh, M. (2001). Knowledge Management Framework for High Teach Research and Development Engineering Management Journal, 13(3): 27 – 34.
- [25] Petrashi, G. (1996). Knowledge management culture. European Management Journal, 14(4): 365 73.
- [26] Polanyi, M. (1996). The Tacit Dimension of Knowledge, New York Press.
- [27] Polanyi, M. (1996). The Tacit Dimension of Knowledge, UK: Boutledge and Kegan Pew.
- [28] Robbins, P., Judge, T. and Sarghi, S. (2007). Organizational Behaviour, Dorling Kindersley (India) Pt Ltd.
- [29] Strati, A. (2007). Sensible knowledge and practice-based learning. Management Learning, 38(1): 61 – 71.
- [30] Wain, A., Teony, L. and Othman, S. (2013). Knowledge management processes and academic performance in Iraq: An empirical investigation. International Journal of Academic Research in Business and Social Sciences, 2(6).
- [31] Wasin, R. Muhammad, K. and Nabila, A. (2015). Knowledge management strategy and performance. A Knowledge Based View Pakistan Economic and Social Review, 53(2): 177 – 202.
- [32] Yaklet, A. (2010). The Corporeality of Practice Based Learning Organization Studies, 31(4): 409 430.