International Journal of Scientific Research and Management (IJSRM)
||Volume||10||Issue||06||Pages||EM-2022-3650-3659||2022||
Website: www.ijsrm.in ISSN (e): 2321-3418
DOI: 10.18535/ijsrm/v10i6.em09

Knowledge Creation and Performance of Private Health Facilities in Kisii County, Kenya

Alice Manyange Abuki, Anne W. Muchemi

Kenyatta University

Abstract
Healthcare is a knowledge-driven industry, as highlighted by the continuously advancing field of medicine and new discoveries in treatments from continuing research. The ability to create both medical and operational knowledge and avail the same and readily accessible could thus mean the difference between well performing and poorly performing health institutions. It however remains unexplored in the Kennya body of knowledge, how the creation of knowledge influences the performance of private health facilities in the country. The present research thus set out to assess the effect of knowledge creation on the performance of private health facilities in Kisii County, Kenya. The study was grounded on both knowledge-based view, and upper echelon theories. The research adopted both descriptive and explanatory research designs, with the target population comprising 135 staff drawn from all 43 private health entities in Kisii County. The research used a census survey with one top cadre staff from each facility forming the unit of observation. The research involved the gathering of data that is primary by utilizing a questionnaire that is semi-structured. Inferential and descriptive calculations were then computed in data analysis. Findings reveal a statistically significant relationship between knowledge creation (β =.446, Sig.= .000<.05) and performance. It is thus concluded that knowledge creation significantly influences performance among private health facilities in Kisii County, Kenya. The study recommends that private health institutions in the country invest in creating knowledge with a view to achieve superior and improved performance.

Key Words: Knowledge creation, Performance, Private Health Facilities

1.0 Introduction

Healthcare is a knowledge-driven industry, as highlighted by the continuously advancing field of medicine and new discoveries in treatments from continuing research (Donate & de Pablo, 2019). Such professional and knowledge-intensive organizations as health institutions are complex by nature and necessitate a wealth of knowledge associated with their complex dynamics (Khodakarami & Chan, 2018). As such, to effectively offer care to patients, staff and providers of healthcare ought to have the ability to constantly create new knowledge. This spans not only clinical information, but also information on procedures and processes within the organization as well as latest treatment and drug information (Maravilhas & Martins, 2018).

The ability to create both medical and operational knowledge and avail the same and readily accessible could thus mean the difference between well performing and poorly performing health institutions (Oraro & Wyss, 2020). Private health facilities' performance is of particular eminence both in advanced and advancing economies. This owes to their role in complementing the shortcomings in public health facilities occasioned by funding constraints through the provision of health-related services, medicines and medical products (Nezenega, Gacho & Tafere, 2017). Their importance is particularly pronounced in view of increases in disease burden, case in point the novel Coronavirus Pandemic (COVID-19), that has since its first reported cases towards the end of the year 2019 and its subsequent spread globally, resulted in public health facilities overstretching their limited resources (Oraro & Wyss, 2020). It however remains unexplored in the Kennya body of knowledge, how the creation of knowledge influences the performance of private health facilities in the country.

Knowledge creation involves the procedure by which information is made available and information generated by persons is amplified, crystalized and integrated into the knowledge memory of an organization (Liebowitz & Frank, 2016). The concept has also been defined by Chung *et al.* (2018) define creation of knowledge as the development of novel concepts and notions, that takes place by way of exchanges between tacit knowledge (information existing in people's minds) and explicit knowledge (information which can be searched and found easily). According to Berraies and Chaher (2018), the procedure of creating knowledge involves two major stages; an interface between knowledge that is explicit and one that is tacit and interface among persons to assemblages then to the whole firm.

A total of 43% the Kenyan health sector is controlled by facilities in private healthcare, which also make up 22% of services in healthcare. In spite of the contribution by the sector, its rate of growth annually keeps decreasing from 2.6%, 2.3% and 1.9% in 2017, 2018 and 2019 respectively (Korir, Moses & & Zeng, 2021). Maina (2015) observes that private health facilities are sought by over 47% of Kenyans. The role of the private health facilities is recognized by the government as instrumental in the realization of the health pillar of the Vision 2030. According to Kioi, Cowden and Karodia (2015), close to 70% of medical doctors in the country work in the private sector, which diminishes poor Kenyan's access to the doctors. A majority of these private health facilities are located in urban centers, most of which in Nairobi County.

Kisii county harbors a number of registered private health facilities, which vary in size. These include satellite facilities of syndicated private hospital chains including the Aga Khan hospital, integrated outpatient healthcare networks including Bliss Medical Centre, private owned hospitals, nursing homes and private-mission hospitals. The system of healthcare in Kisii county is momentously influenced by the available private facilities, though a majority of residents who can access the facilities are scheme members from their various workplaces (Obwocha, Ayodo, Nyangura & Ondimu, 2016).

According to the Kisii County Annual Development Plan (2019/2020), Annual Development Plan (2020/2021) and Annual Development Plan (2021/2022), Kisii county has over the last three (3) years leading to the year 2021 reported increased disease rates. Common causes of the high disease rates in the county include Human Immunodeficiency Virus, Acquired Immunodeficiency Syndrome (HIV/AIDS) related illnesses, malaria, diarrhoea, skin diseases and respiratory diseases. Many of these conditions also commonly contribute to increased hospital visits and high mortality rates, according to the Kisii County government development plans. Also in the county, private health facilities continue to report various operational challenges including high stock-outs of essential medicines and long cycle time, which denotes the length of time taken between ordering supplies from the Kenya Medical Supplies Agency (KEMSA) and delivery, which not only affect their delivery of health services, but also their annual turnover particularly occasioned by the operational challenges including stockouts and long cycle time (Magak & Muturi, 2019).

The foregoing point to a dismally performing healthcare sector in Kisii County, marred by various disease burden and operation-related shortcomings. Accordingly, it is expected that compared to public health facilities operating within a budget, private health facilities will leverage their resources and adopt strategies aimed at addressing the foregoing challenges for desirable performance. Among these strategies include the pursuit of new knowledge to improve clinical outcomes and patient experiences as well as reduce operational inadequacies, as Donate and de Pablo (2019) opine. It however remains scantily explored how private health facilities in Kenya in general and Kisii county in particular practice knowledge creation and how the same influences organizational performance thereof, presenting a contextual gap that the present study sets out to address.

Whereas studies attempt to link practices in management of knowledge including knowledge and performance of organizations, their focus was on the telecommunication industry (Karani, 2015), public service sector (Wanyama, 2018) and banking sector (Kangogo, 2015), which operate differently from the private health sector, and so the findings may not be applicable to private health facilities in Kisii county, hence the contextual gap necessitating the present study. Further, the foregoing studies only adopted either the descriptive or cross-sectional designs in isolation, while the present study employs both explanatory and descriptive cross-sectional research designs with a view to statistically characterize the variables and articulate the association between the product and manipulated variables. By so doing the study will address the existing methodological gap pertaining to the research designs used in previous related studies. Against this backdrop, the present research sets out to bridge the highlighted methodological, contextual and

conceptual gaps on how knowledge creation affects private health facilities' performance in Kisii County, Kenya; and subsequently test the null hypothesis that knowledge creation does not have a significant effect on the private health facilities' performance in Kisii County, Kenya (H_0).

2.0 Literature Review

Bihamta, Nowzari, Eghtebasi, Subramaniam, Salimi and Salehi (2018) examined how the mechanism of creation of knowledge influences performance of organizations, focusing on Malaysian automotive industry. In this study, as a model for quality process, the fundamental functions of knowledge formation in terms of socializing, externalization, synthesis, and introspection were investigated. Adopting the cross-sectional survey design, the study found a positive association between managing knowledge and performance of organizations. The study concluded that across most companies across the globe, the practice of constant improvement is among the most important and prevalent programs. The study however only focused on knowledge creation which is a narrow dimension of knowledge management findings of which may therefore not be applicable to the broader concept of knowledge management The study also focused on the automotive industry, which is a different industrial context from the private health sector, findings of which may also not be applicable in the current study context.

Chung, Liang, Peng and Chen (2018) investigated how the agility of an organization intervenes the connection between the performance of a firm and the procedure of creating knowledge. The study targeted 217 electronic businesses in Macau, China and adopted structured instruments. It was discovered in the research that the agility of an organization significantly intervenes the connection between the creativity of the organization and procedure of creating knowledge which, collectively exert a notable influence on the organization's performance. The study however adopting a non-linear model, focusing on the mediating function of organizational agility which does not depict the direct linkage between the generation of knowledge and the functioning of organizations. Further, the study was fixated on electronic businesses, which is a different industrial context from the private health sector, findings of which may also not be applicable in the current study context.

Berraies and Chaher (2016) examined how the procedure of creating knowledge predicts the outcomes of an organization in terms of innovation and how the same influence learning in the organization. Targeting 191 Tunisian MSMEs in the Information and Communications Technology (ICT) sector, the outcomes demonstrate a connection between the procedure of creating knowledge and learning in an organization and outcomes in terms of innovation. The eminence of such activities as externalization, internalization and socialization, that results in innovation outcomes for the firms in ICT in Tunisia were identified as significant predictors. The study however focused on organization's innovation performance, which is a narrower aspect of organizational performance, and may therefore not be generalizable to private healthcare facilities. Further, the study focused on ICT sector MSMEs, which is a different industrial context from the private health sector, findings of which may also not be applicable in the current study context.

Iyer et al. (2017) explored how innovation outcomes are predicted by such systems in an organization as creation of knowledge. Adopting a desktop review design, the outcomes of the research indicate that knowledge creation significantly influences innovation performance; and systems in an organization intercede the connection between innovation outcome and creation of knowledge, supporting the notion that the key-most enabler of creating knowledge is the organization. Sources of knowledge that are internal are observed to result in contributing a greatly to transmission of information within an organization in comparison to sources of knowledge which are in the organization's exterior. The study was however desktop in design, which lacks focus in both geographical and industrial context. Thus, the study outcomes may not be applicable in this research setting, which is the private health sector in Kenya.

Cheruiyot, Jagongo and Owino (2017) investigated knowledge management's institutionalization with a particular focus on enterprises in the manufacturing sector in the country. A total of 60 managers in senior position were sampled drawing from three (3) chosen enterprises in the manufacturing sector. Outcomes depicted that, two vital factors exist, influencing knowledge management's institutionalization, that is technological infrastructure and organizational practices. The study came to the deduction that organizational activities that include knowledge creation, distribution have the highest influence in creating value for the organization and thus, when one takes a holistic perspective in establishing practices of

knowledge management, organizational practices ought to be first prioritized, followed by technological resources. The study did not however show a linkage between knowledge management and organizational performance, as it was focused articulating the institutionalization of knowledge management. Whereas the study was conducted in the Kenyan context, the industrial context was the manufacturing sector which is operationally different from the private health sector context. Outcomes of the research may therefore not be generalizable to the current study context.

3.0 Research Methodology

The research adopted both explanatory and descriptive research designs. Ghauri and Gronhaug (2010) intimate that, the explanatory survey is utilized when the research being carried out is aimed at elucidating the causal connection between concepts upon computation of numerical information that is gathered objectively and hypotheses are tested empirically. The descriptive study design on the other hand seeks answers to the investigations of what, who, when, how and where, associated with a particular study issue and articulates a phenomenon, population, event or their association (Mertens, 2010). The research design is relevant to this research since it sought to give an articulate account of statistical connections among the independent and dependent concepts. The descriptive research design is further deemed appropriate in the present research as the research utilized structured questionnaires in data collection at one point in time.

The study's population consists of 135 staff drawn from all 43 private health entities in Kisii County in accordance with the Kisii County Annual Development Plan (2021/2022). These comprised of 5 top cadre staff drawn from each facility, including senior health records and information officers, heads of nursing, senior radiologists, heads of pharmacy and senior medical engineering technologists. Private health facilities in Kisii County were settled on as the target population owing to the consistently increasing burden of disease in the county, as highlighted by the Kisii County Annual Development Plan (2019/2020), Annual Development Plan (2020/2021) and Annual Development Plan (2021/2022), Kisii county has over the last three (3) years leading to the year 2021 reported increased disease rates. This was coupled with a report on the challenges of performance of the County's Private health facilities (Magak & Muturi, 2019).

The study adopted a combination of census and purposive sampling. A census approach was adopted in selecting all 135 staff from the 43 private health facilities in Kisii County owing to the relatively manageable size of the population. Purposive sampling was on the other hand adopted in reaching 5 top cadre staff from each facility due to their possession of prerequisite information pertinent to the study. According to Collis and Hussey (2009), census involves the recording, acquisition and enumeration, of information concerning every item in a population in a systematic fashion which is in contrast to selection in which information can only be obtained from the subset of a population.

The researcher obtained letter of authorization of research from Kenyatta for purposes of obtaining a research permit. The permit of research and letter of authorization were then submitted to the private health facilities in Kisii County during gathering of information, before the administration of the questionnaires. The researcher then first introduced herself to the respondents as well as introduce the study and its objectives. The researcher then proceeded to take the respondents through the questions and demonstrate how to respond. She then left the questionnaire with the respondents and indicate the scope of time within which she would require the dully filled questionnaire and left her contact for collection of completed questionnaire as well as any clarifications sought.

A pilot study was conducted to pretest the questionnaire for validity and reliability. A pilot sample of 14 respondents was selected in this regard, in line with Kothari (2004) who argued that a pilot study sample should be 10% of the sample projected for the larger parent study. In this research, both content and face validity tests were executed. While validity of the content meters if a construct vigorously indicates of all of a construct's features, validity of the face meters if the index seems to gauge the construct it was designed to (Kothari, 2004). To check for both face and content validity, expert perspective from the project supervisor was obtained. To this end, the research supervisor assessed and review the instruments, upon which questionnaire items deemed valid was maintained, while invalid questions were either reviewed or eliminated from the questionnaire. Validity tests were passed successfully, with the project supervisor having given a nod for fieldwork.

To ascertain reliability, Cronbach's alpha was utilized to gauge internal constancy with the threshold set at 0.7. It is similarly opined by Collis and Hussey (2009), that Cronbach Alpha values above 0.7 are "recommended", while values ranging from 0.4 to 0.7 are "acceptable". Tashakkori and Teddlie (2010) further postulate that one regards a questionnaire as "highly reliable" if Cronbach Alpha values that fall within 0.82 and 1.00 are recorded; and "sufficiently reliable" if within 0.64 and 0.81. Further, questionnaires are regarded as having "low reliability" if Cronbach Alpha values fall within 0.46 and 0.64; and "not reliable" if the recorded Cronbach Alpha values are within the range of 0.10 to 0.45. Table 3.1 gives a depiction of the test results for reliability.

Table 3.1: Reliability Analysis

Variable	Cronbach Alpha	No of Items	Decision
Knowledge Creation	0.951	5	Highly Reliable
Performance	0.992	4	Highly Reliable
Overall	0.922	9	Highly Reliable

Source: Survey Data (2022)

Outcomes observable from Table 3.1 are of the indication that Cronbach alpha values for both variables were above 0.70, with performance at a Cronbach alpha value of 0.992 and knowledge creation at .951). The overall reliability coefficient for the whole questionnaire was 0.922 implying that the questionnaire was reliable.

Information gathered from fieldwork was entered into the Statistical Package for Social Sciences, version 26 after cleaning and coding, before analysis. A calculation of both descriptive and inferential figures was then computed. Descriptive statistics included standard deviations, frequencies, means and percentages were projected by use of figures and tables. Both regression and correlation computations were executed to test the stated hypotheses. The following model of regression was utilized to ascertain how practices in the management of knowledge influence performance.

$Y= \beta_0 + \beta X + \varepsilon$

Y = Performance

β0 is a constant and represents the value of Y when X = 0.

β represents the regression coefficients which measures the average change in the value of the dependent variable

X = Knowledge creation

ε = Error term

4.0 Findings

The study set out to determine the effect of knowledge creation on performance of private health facilities in Kisii County, Kenya. To this end, both descriptive and inferential analyses are presented. Under descriptive analysis, results are presented in frequencies, percentages, means and standard deviation, while under inferential statistics, both Pearson correlation and multiple regression analyses are carried out. Content analysis was on the other conducted for the qualitative data.

4.1 Descriptive Statistics

The variables advanced in the study were evaluated for their descriptive computations with a view to indicate their manifestations in the private health facilities surveyed. These comprised of knowledge creation indicated by employee training, benchmarking and exchange programmes and organizational performance indicated by number of outpatient visits attended, mortality rate, annual turnover and supply chain cycle time.

4.1.1 Knowledge Creation

The study set out to establish the effect of creation of knowledge on performance of private health facilities in Kisii County, Kenya. A computation of the descriptive statistics was then performed on the concepts based on "five-point Likert scale", running from 1 through 5, provided: "No degree" as 1, "Low degree" as 2, "Moderate degree" as 3, "Great degree" as 4, "Very great degree" as 5. Mean values fluctuating from 2.4 downwards imply low approval, while means within 2.5 and 3.4 mean middle-ground approval and means ranging from 3.5 through 5.0 mean high approval. Table 4.2 gives a depiction of the outcomes.

Table 4.2: Knowledge Creation

	Mean	Std. Dev
New information is obtained in the facility by training staffs	4.091	.928
The facility facilitates staffs to take part in workshops and seminars that are relevant	4.083	.900
The facility sponsors benchmarking exercises for employees to acquire new knowledge	4.038	.903
In our facility, new knowledge is created through market research	4.076	.853
The facility sponsors various exchange programmes for employees to acquire new knowledge	4.053	.902
Composite	**4.068**	**0.897**

Source: Survey Data (2022)

Outcomes observable from Table 4.2 depict an aggregate average of 4.068 (SD=0.897), meaning that a lot of the participants approve highly, of the questions posed with regard to employee training, benchmarking and exchange programmes as the attributes of knowledge creation as practiced by their respective private health facilities. In more specific terms, most of the participants approved to a notable degree, that new information is obtained in the facility by training staffs (4.091); the facility sponsors benchmarking exercises for employees to acquire new knowledge (4.038); new knowledge is created through market research (4.076); the facility facilitates staffs to take part in workshops and seminars that are relevant (4.083); and that the facility sponsors various exchange programmes for employees to acquire new knowledge (4.053).

4.1.2 Performance of Private Health Facilities

A descriptive computation of performance of private health facilities in Kisii County, Kenya was carried as indicated by number of outpatient visits attended, mortality rate, annual turnover and supply chain cycle time on a "five-point Likert scale" running from 1 to 5, provided: "No degree" as 1, "Low degree" as 2, "Moderate degree" as 3, "Great degree" as 4, "Very great degree" as 5. Mean values fluctuating from 2.4 downwards imply low approval, while means within 2.5 and 3.4 mean middle-ground approval and means ranging from 3.5 through 5.0 mean high approval. Table 4.2 gives a depiction of the outcomes.

Table 4.2: Descriptive Statistics for Private Health Facilities

	Mean	Std. Dev
The number of outpatient visits in our facility has increased in the last five (5) years	4.114	.826
The mortality rate in our facility has decreased in the last five (5) years	4.083	.820
Our facility's annual turnover has increased in the last five (5) years	4.068	.803
In our facility, the length of time taken to process customer orders has decreased in the last five (5) years	4.099	.837
Composite	**4.091**	**0.822**

Source: Survey Data (2022)

Outcomes observable from Table 4.2 depict an aggregate average of 4.091 (SD=0.822), meaning that a lot of the participants approve highly, of the questions posed with regard to number of outpatient visits attended, mortality rate, annual turnover and supply chain cycle time as attributes of organizational performance of private health facilities. In more specific terms, a lot of the participants approved to a notable degree, that in the respective private health facilities, the number of outpatient visits in our facility has increased in the last five (5) years (4.114); in the facility, the length of time taken to process customer orders has decreased in the last five (5) years (4.099); the mortality rate in our facility has decreased in the last five (5) years (4.083); and that facility's annual turnover has increased in the last five (5) years (4.068).

The findings imply that most private health facilities surveyed have in the last 5 years recorded a notable improvement in their respective organizational performance. It is particularly notable from the findings that most of the facilities have recorded growth in the number of outpatient visits and annual turnover. There has also been a reduction in the mortality rate and the length of time taken to process customer orders in their facilities, in the last five (5) years. These is attributed by respondents, to improvements in both employee competences and productivity, which consequently lead to operational efficiencies and customer satisfaction from knowledge management practices.

4.2 Inferential Statistics

Th study carried out both regression and Pearson correlation analyses under inferential statistics, in order to model the linear connection between the predictor and product factors and test the advanced hypotheses of the research. These statistical operations were performed, assuming that: there exists a linear connection between the predictor and outcome factors; and that for accuracy of estimation, the concepts are typically spread.

4.2.1 Pearson Correlation

To approximate the course and scale of the connection between the predictor and product factors, this research utilized Pearson correlation. To this end, the correlation value (r), depicted the correlation's scale, while the statistical significance value (Sig.) depicted the association's significance. Table 4.3 gives a depiction of the outcomes.

Table 4.3: Pearson Correlation Matrix

		Performance
Performance	r	1
	Sig.	
Knowledge creation	r	.564**
	Sig.	.000

From the depiction in Table 4.3, a significant, positive and moderate linear connection was observed between knowledge creation and performance (r = .564; Sig. = .000).

4.2.2 Regression Analysis

To depict the significance of each independent variable on the dependent variable and hence test the hypotheses, a regression analysis was performed with all other factors held at constant. As a result of the regression computation, three outputs were produced that is model summary, Analysis of Variance (ANOVA) and coefficients. To test the advanced hypotheses, the outcomes of the regression coefficients were interpreted based on their statistical significance. Tables 4.4, 4.5 and 4.6 below present the findings.

Table 4.4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.564[a]	.318	.313	2.69099
a. Predictors: (Constant), Knowledge creation				

A 0.564 correlation value (R) was observed from the output in Table 4.4, modelling a linear linkage that is strong, among the concepts of knowledge creation and performance. A R^2 value of 0.318 was also observed, implying that knowledge creation accounts for 31.8% of performance's variations, and the balance of 68.2% ascribed by other factors which the regression model in this research did not include. From the depiction in Table 4.5, an ANOVA test was also produced from the regression analysis.

Table 4.5 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	439.157	1	439.157	60.645	.000[b]
	Residual	941.389	130	7.241		
	Total	1380.545	131			
a. Dependent Variable: Performance						
b. Predictors: (Constant), Knowledge Creation						

Outcomes of the ANOVA test as per the depiction in Table 4.5 show the modelling of the connection between the adopted knowledge management and performance was of statistical significance (F = 60.645, Sig. < 0.05). The outcomes also depict that based on the total squares sum (1380.545), the regression squares sum was 439.157, carried out at 95% level of confidence. This means that the model of regression accounts for approximately 31.8% of the dataset's variability, while the residual squares sum is 941.389 meaning that 68.2% of the dataset's variability is unaccounted for.

Table 4.6: Regression Coefficients

Model	Unstandardized	Standardized	t	Sig.

		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	7.291	1.188		6.136	.000
	Knowledge creation	.446	.057	.564	7.787	.000
a. Dependent Variable: Performance						

Table 4.6 reveals that knowledge creation significantly influence performance at 95% confidence level, while knowledge storage (β =.446, Sig.= .000<.05). The finding provides enough evidence to reject the null hypotheses that knowledge creation is not significantly associated with performance of private health facilities in Kisii County, Kenya (H_0). The study therefore concludes that there exists a statistically significant relationship between knowledge creation and performance of private health facilities in Kisii County, Kenya.

The findings are consistent with Bihamta *et al.* (2018) who found a positive association between managing knowledge and performance of organizations in their examination of how the mechanism of creation of knowledge influences performance of organizations, focusing on Malaysian automotive industry. Similarly, Berraies and Chaher (2016) demonstrated a connection between the procedure of creating knowledge and learning in an organization and outcomes in terms of innovation among Tunisian MSMEs in the ICT sector. Similar results are also reported by Cheruiyot *et al.* (2017) who came to the deduction that organizational activities that include knowledge creation, distribution have the highest influence in creating value for enterprises in the manufacturing sector in Kenya.

4.3 Content Analysis

Probed on whether in their experience, knowledge creation in their facility influenced organizational performance, a majority of respondents answered in the affirmative, indicating that these avenues of knowledge creation result in the introduction of new knowledge in the health facilities which in turn result in the improvement of processes and quality of service discharged to their patients. A respondent argued that:

> *"……by training our staffs and sending them on benchmarking exercises, they get exposure to different and better ways of operating and serving patients, which we then incorporate in our facility….."*
>
> Respondent number 6

It is thus deducible based on the outcomes, that most private health facilities in the study area employ a variety of practices aimed at creating knowledge in the individual facilities. Most common among these include training of staffs, market research, staff participation in workshops and seminars, benchmarking exercises and that exchange programmes for employees. It also found that a statistical link is extant between creation of knowledge and performance of private health facilities in Kisii County, Kenya. By introducing new knowledge in the health facilities through these knowledge creation practices, organizational performance is improved through the improvement of processes and quality of service discharged to patients.

5.0 Conclusion

The study determined the effect of knowledge creation on performance of private health facilities in Kisii County, Kenya. Based on the findings, the study concludes that a statistical link is extant between knowledge creation and performance of private health facilities in Kisii County, Kenya. This is attributable to the variety of knowledge creation practices carried out by the individual health facilities, which result in the improvement of processes, staff productivity, staff competence and the quality of services discharged to patients. By training staffs, conducting market research, benchmarking and exchange programmes as well as staff participating in workshops and seminars, new knowledge is introduced in the facility which result in more efficient operational practices, better customer service and customer retention.

6.0 Recommendations

The study established that knowledge creation has a statistically significant effect on the performance of private health facilities in Kisii County, Kenya. As a result, it is suggested that private health institutions in the country invest in creating knowledge with a view to achieve superior and improved performance. These include the development of and participating in training programmes, workshops and seminars for staffs across top, middle and lower job cadres; carrying out periodic market research for establishment of new

processes, equipment and medical procedures; embarking on benchmarking exercises and exchange programmes for observation of best practices from industry leaders.

References

1. Alonso, P., S., & Viridiana, L., S. (2017). A Model Based on Core Processes and Knowledge. *The ICFAI Journal of Knowledge Management*.
2. Chiu, C. & Chen, H. (2016). The study of knowledge management capability and organizational effectiveness in Taiwanese public utility: the mediator role of organizational commitment. SpringerPlus. 5. 10.1186/s40064-016-3173-6.
3. Choi, B., & Lee, H. (2019). An empirical investigation of Knowledge Management styles and their effect on Corporate performance. *Information and Mangement*, 8(1): 403-417.
4. Collis, J. & Hussey, R. (2009). *Business research: A practical guide for undergraduate and postgraduate students*. 3rd edition, New York, Palgrave Macmillan.
5. Donate, M. J., & de Pablo, J. D. S. (2019). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of business research*, *68*(2): 360-370.
6. Esterhuizen, D., Schutte, C. S., & Du Toit, A. S. A. (2019). Knowledge creation processes as critical enablers for innovation. *International Journal of information Management*, *32*(4): 354-364.
7. Ghauri & Gronhaug (2010). *Research methods in business studies*. Fourth edition. Essex: Pearson
8. Ireri, R. W. (2017). *Strategic knowledge transfer as a source of competitiveness at Kenya Power.* University of Nairobi.
9. Kangogo, F. (2015). Influence of Knowledge Management Practices on Enhancing Service Delivery in The Banking Sector in Kenya: A Case of Commercial Banks in Kenya. *Journal of Business and Change Management*, 2(84): 1072 - 1100,
10. Karani, R. A. (2015). *Effect of knowledge management practices on performance of mobile telephone companies in Kenya* (Doctoral dissertation, Master Thesis).
11. Khodakarami, F., & Chan, Y. E. (2018). Exploring the role of customer relationship management (CRM) systems in customer knowledge creation. *Information & management*, *51*(1): 27-42.
12. Kioi, S. W., Cowden, R., & Karodia, A. M., PhD. (2015). An evaluation on in- patient satisfaction at meridian equator hospital (Nairobi, kenya). *Arabian Journal of Business and Management Review* (Oman Chapter), 4(7): 32-70
13. Kisii County Annual Development Plan (2019/2020). Available at http://www.kisii.go.ke/index.php/files/153/Downloads/34/Annual-Development-Plan-2019-2020.pdf
14. Kisii County Annual Development Plan (2020/2021). Available at http://www.kisii.go.ke/index.php/files/153/Downloads/34/Annual-Development-Plan-2020-2021.pdf
15. Kisii County Annual Development Plan (2021/2022). Available at http://www.kisii.go.ke/index.php/files/153/Downloads/34/Annual-Development-Plan-2021-2022.pdf
16. Korir, J., Moses, M.W. & Zeng, W. (2021). Performance assessment of the county healthcare systems in Kenya: a mixed-methods analysis. *BMJ Global Health*, 6(4):4-7. doi:10.1136/bmjgh-2020-004707
17. Kothari, C. R. (2004). *Research methodology: Methods & techniques*. New Delhi: New Age International (P) Ltd.
18. Magak, W. & Muturi, W. (2019). Factors Influencing Frequent Stock-outs of Essential Medicines in Public Health Facilities in Kisii County, Kenya. *Journal of Business and Management (IOSR-JBM),* 18(10): 63-75
19. Maina, M. N. (2015). Effect of customer perception on performance of private hospitals in Nairobi: a case study of Karen Hospital. *International Journal of Business and Commerce*, (5)(6): 60-80.
20. Maravilhas, S., & Martins, J. (2018). Strategic knowledge management a digital environment: Tacit and explicit knowledge in Fab Labs. *Journal of business research*, 2(5): 569-578.
21. Mertens, B. (2010). *Research methods for social workers.* Boston: Allynand Bacon
22. Momeni, M., Monavarian, A., Shaabani, E. & Ghasemi, R. (2018). A Conceptual Model for Knowledge Management Process Capabilities and Core Competences by SEM; a Case of Iranian Automotive Industry. *European Journal of Social Sciences*, 22(4): 1-21

23. Nezenega S., Gacho M. & Tafere E. (2017). Patient satisfaction on tuberculosis treatment service and adherence to treatment in public health facilities of Sidama zone, South Ethiopia. *BMC Health Services Research*, 13(1): 110-121.
24. Obwocha, W., Ayodo, G., Nyangura, A. & Ondimu, T. (2016). Utilization of Healthcare Information Among Healthcare Workers in Gucha Subcounty, Kisii County, Kenya. *Journal of Health Education Research & Development*, 4(4): 192
25. Oraro, T. & Wyss, K. (2020). Policy levers and priority-setting in universal health coverage: a qualitative analysis of healthcare financing agenda setting in Kenya. *BMC Health Serv Res*, 20(6):18-22.
26. Tubigi, M., & Alshawi, S., N. (2018). The impact of knowledge management processes on organizational performance. The case of the airline Industry. *Journal of Enterprise Information Mnagement*, 28(2): 167-185.
27. Wanyama, V. T. (2018). *Effect of Knowledge Management on Organization Performance in The Public Service Sector in Kenya.* Unpublished Masters Thesis, KCA University
28. Zahari, A., S., Rahman, B., A., Othman, A., K., & Baniamin, R., M. (2019). The Influence of Knowledge creation on Organizational Performance among Insurance Companies in Malaysia. J*ournal of Applied Environmental and Biological Sciences*, ISSN 2090-4274.