



TOTAL QUALITY MANAGEMENT PRACTICES AND PERFORMANCE OF LEVEL FOUR HOSPITALS IN KILIFI COUNTY, KENYA

Hashim, R. M., & Kiiru, D.

TOTAL QUALITY MANAGEMENT PRACTICES AND PERFORMANCE OF LEVEL FOUR HOSPITALS IN KILIFI COUNTY, KENYA

¹ Hashim, R. M., & ² Kiiru, D.

¹ MBA Student, Business Administration Department, Kenyatta University (KU), Kenya

² Doctor, Lecturer, Business Administration Department, Kenyatta University (KU), Kenya

Accepted: September 10, 2022

ABSTRACT

The study examined the relationship between total quality management practices and the performance of Level four Hospitals in Kilifi County. The explanatory research design was utilized in this study. The targeted population was 303. The unit of analysis included Kilifi level four hospital, Mariakani level four hospital, Malindi level four hospital and Tawfiq level four hospital. The study used the stratified random technique to select the respondents. The sample size was 172 respondents, obtained using the Yamane formula. Content analysis was used to examine the qualitative data and the results were presented in writing. Quantitative results included both descriptive and inferential statistics. The study found the health care continuous improvement, customer focus, employee empowerment and top management commitment had a positive and significant relationship with the performance of level 4 hospitals in Kilifi County. The study concluded that the hospitals the employees are motivated through benchmarking which enable a mindset and culture of continuous improvement and the hospital management encourages engagement of employees in decision making. The hospitals offer prices that are affordable to their which has enabled it to increase their client base and hence better performance. The hospital had empowered their employees by laying trust on them and motivated them for better performance. The management of the hospitals were committed towards seeing better performance of the level four hospitals within the County. The study recommended that the hospitals should guarantee that there is effective communication which is a key element for the continuous culture through conveyance of the right message on the right time to enable the employees align with the corporate culture. The hospital management should first identify customer needs and expectations. Seek and promote customer feedback by allowing the customers to share their views of the hospitals on an individual basis. The hospital management should carry out delegation of duties to employees with and intention to grow and develop the capabilities and responsibilities of its employees. The hospital management should build better employee-employer relationships by indispensably motivate its workforce, give due credit and recognize a job well done and ensure that the employees are regularly and steadily consulted about critical decisions.

Key Words: Health Care, Customer Focus, Employee Empowerment, Top Management Commitment

CITATION: Hashim, R. M., & Kiiru, D. (2022). Total quality management practices and performance of level four hospitals in Kilifi County, Kenya. *The Strategic Journal of Business & Change Management*, 9 (4), 419 - 439.

INTRODUCTION

The performance and sustainability of the hospital are beneficial to society (Gabra, Yousef & Abood, 2019). There are two critical measures of any institution's performance: financial and non-financial. Financial performance metrics are extracted from the published accounts and information of the company (Valentine, 2017). Financial performance measures are the ultimate goal for any business (Ngothi, 2020; Shambaro, 2017; Lala, Ndinya, Ogada, Chepkulei, Omido & Apollo, 2019). The non-financial measures of the performance are subjective and can incorporate customer satisfaction, employee retention and customer service (Choge, 2020).

Hospitals' performance can be determined through financial and non-financial performance indicators (Moore, Robbins, Quinn & Arbogast, 2021). Financial performance measures, also termed subjective measures, relate to economic indicators, such as profitability, sales growth, return on assets, or sales (Wu, Deng, Wang & Wang, 2021). Good performance is essential for every institution and cannot just be thought to be performing when it cannot be gauged, monitored and tested against the set requirements. Hospital performance evaluation is a significant management element that influences hospitals' quality and quantity of healthcare delivery (Tasi, Keswani & Bozic, 2019). Health care administration and leadership are required to make decisions and ensure that the hospital provides quality, accessible and affordable healthcare services.

TQM practices aim to achieve excellence involving all employees (Zaid, Arqawi, Mwais, Al Shobaki & Abu-Naser, 2020). In healthcare settings, the performance of the employees can be measured based on the health outcomes and patient satisfaction (Yousef, 2017). It was indicated by Gabra, Yousef and Abood (2019) that knowing the problems that hinder TQM execution enables an organization to create more effective techniques for executing TQM in healthcare. The TQM can include health care regular improvement, client oriented,

worker empowerment and top management deviation (Ishijima, Miyamoto, Masaule & John, 2021; Kavulya, Muturi, Rotich & Ogollah, 2018; Sajid, 2019; Mutiso, 2017; Mwhia, 2020; Leonard & Needham, 2020; Mwikali & Bett, 2019).

In 2014, the Republic of Kenya noted that it has various healthcare facilities, which begin with the community healthcare facilities and then go on to high levels of healthcare facilities where complex scenarios are referred to. Dispensaries and small health centers are the basic healthcare facilities. Public hospitals in Kenya are categorized into six levels depending on the infrastructure (Nzinga, McKnight, Jepkosgei & English, 2019). In the study, only level four hospitals will form the unit of analysis. Level 4 sub-county healthcare facilities take care of around 100,000 individuals. In Kilifi County, the numbers of level four hospitals are four. These include Kilifi level four hospital, Mariakani level four hospital, Malindi level four hospital and Tawfiq level four hospital (MoH, 2017).

However, the quality of services from the public hospitals in Kenya has been inadequate. In some cases, poor performance has characterized the hospitals (Barasa, Cleary, Molyneux & English, 2017). In Kenya, the performance of public hospitals has not been optimal. The health care facilities are currently encountering challenges on various accounts. The prices of medicines are increasing daily, hospitals are dilapidated, death rates are rising, and hospitals are destitute (Ngure & Waiganjo, 2018). It is estimated that 74,000 children in Kenya die every year before reaching the age of 5 years (Dennis, Benova, Abuya, Quartagno, Bellows & Campbell, 2019).

In addition, Kenya still has a relatively high infant mortality rate at 362 deaths per 100,000 live births (Abuga, Kariuki, Kinyanjui, 2018). Further, there have been regular countrywide strikes of medics in the public hospital, citing poor working conditions and the government's failure to address their grievances (Kithinji, 2019). The infant mortality rate in Kilifi County was 51.13 in 2015, 50.06 in 2016, 49.83 in 2017, 49.62 in 2018 and 49.59 in 2019.

Tengah and Otieno (2019) reported that public hospitals in Kilifi County lack enough health workers, which deteriorates the performance of these hospitals. This forms the motive behind the conducting of the present research.

Statement of the Problem

The public hospitals performance in Kenya has not been optimal. The quality in healthcare is still a distant dream for hospitals in Kenya. In Kilifi County, the performance of some public hospitals has been dismal, leading to loss of life. The infant mortality rate in the county was 51.13 in 2015, 50.06 in 2016, 49.83 in 2017, 49.62 in 2018 and 49.59 in 2019 (United Nations Inter-Agency Group for Child Mortality Estimation, 2020). This implies an average of 49 deaths per 1000 live births between 2015 and 2019. Moreover, it is reported that level four hospitals in Kilifi County have inadequate doctors and nurses to attend to patients despite the private hospitals in the region having enough doctors and nurses (Tengah & Otieno, 2019).

This forms the motive behind the current study to evaluate the effect of TQM practices on the performance of public healthcare facilities in Kilifi County. The preceding studies are inadequate to make comprehensive inferences regarding level four hospitals in Kilifi County. For instance, Oloo, Atambo and Muturi (2017) examined the impact of procurement procedures on the effectiveness of Kenya's public healthcare institutions. The research was focused on procurement practices, thus presenting a conceptual gap. Moreover, Mwikali and Bett (2019) surveyed the impact of TQM practices on service delivery at the Nairobi hospital. The research was performed in a private hospital, depicting a contextual gap.

Moreover, Abubakar and Wainaina (2019) looked at employee turnover and healthcare facility performance of chosen private healthcare facilities in Kilifi County. The study was concentrated on private hospitals and thus depicted a contextual gap. Hence, based on the few reviewed studies, the scholars have only illustrated the theoretical knowledge of the influence of TQM practices and

performance since none of them focused on level four hospitals in Kilifi County. Thus, there was a need for further studies. Therefore, the knowledge gap was ascertained by examining the effect of TQM practices on the performance of level four hospitals in Kilifi County.

Objectives of the Study

The main objective of this study was to explore if there is a correlation between the performance of Kilifi County's Level Four Hospitals and total quality management techniques. The study was guided by the following specific objectives;

- To find out the relationship between health care continuous improvement and performance of level four hospitals in Kilifi County
- To examine the relationship between customer focus and performance of level four hospitals in Kilifi County
- To determine the relationship between employee empowerment and performance of level four hospitals in Kilifi County
- To examine the relationship between top management commitment and performance of level four hospitals in Kilifi County

LITERATURE REVIEW

Theoretical literature review

Kaizen Theory

The Kaizen Theory was discovered by Masaaki Imai (1986). The kaizen theory is based on the principle that processes are improved, mastered, and further improvement is identified (Anderson, Rungtusanatham & Schroeder, 2004). Kaizen is a method of executing small and incremental changes to attain good quality and greater efficiency. The theory purports that employees often suggest changes and arise due to organizational culture, motivating workers to identify and recommend improvements (Dudin, Frolova, Gryzunova & Shuvalova, 2015). This implies that they result in quicker delivery, reduce costs and greater customer satisfaction. The critical objective of the theory is to determine and get rid of waste in every sector that could lead to inefficiency (Landesberg, 2009). The

Kaizen theory indicates that continuous quality emphasis can determine significant quality enhancement (Sollecito & Johnson, 2013).

Coordination theory

The proponents of the coordination theory were Kevin Crowston, Joseph Rubleske and James Howison in 1994. The theory reports that effective coordination of the activities in an organization increases financial performance and sustainability. The theory assumes that effective coordination of the activities is found when the department's communication is satisfactory and customers are treated worthy (Gittell & Suchmann, 2013). Effective coordination of customers is essential for customer retention and facilitating the repeat purchase of goods and services (Lu, Xiang, & Wang 2011).

Empowerment Theory

The advocate of empowerment theory is Julian Rappaport (1981). The theory states that motivation, empowerment and effort influence performance. The theory assumes that empowered workers are highly performing than those workers who are not empowered. Empowering the employees can be training, involvement in decision-making and rewards (Perkins & Zimmerman, 1995). Workers' empowerment has gotten broader recognition as an essential topic in administration area (Zimmerman, 2000). The empowerment programs increase productivity, improve client contentment, and brings in competitive advantage (Turner & Maschi, 2015). The theory demonstrates that employee productivity has a significant impact on motivation of the employees in meeting the set goals, which can be determined based on the empowerment levels (Peterson, 2014).

Crosby Theory

Theoretician who advanced the theory was Philip Crosby in 1984. The theory assumes the performance of any institution can be improved through effectiveness in staff management and recognition; policies utilized to gauge quality and educating staff and workers (Anastasiadou, 2015). The theory assumes that quality is the center of

everything in organizational management. The theory indicates that management sets quality policies and not from any other person. The management has to set policies according to customers' needs and desires (Chowdhury, Paul & Das, 2007). The theory indicates the organization's performance is mainly influenced by the management and other employees (Linderman, Schroeder, Zaheer & Liedtke, 2004).

Balanced Scorecard Model

The significance of a balanced scorecard is that it expands the capacities of the administration to advance implementations and merchandise (administrations) and measure and screen progress towards vital objectives (Kaplan, 2010). The administration needs to glimpse the foundation's monetary exhibition and the use of monetary assets, view the institutional presentation from the client's perspective or pivotal partners the establishment is intended to serve, and view the quality and viability of the establishment's exhibition related to the merchandise, administrations, or other significant business strategies (Hoque, 2014; Kaplan & Norton, 2001).

Empirical Literature Review

Ker, Wang and Hajli (2018) performed research to determine the impact of health care kaizen on healthcare service improvement in US hospitals. The study's results indicated that adapting HIS has more potential to reduce the disorders in the outpatient surgery unit and lead to decreasing the period and cost concerning patient flow. The study concluded that adopting the health care kaizen has a favorable and significant impact healthcare service improvement. However, the research was performed in US hospitals and the current will be performed in Kenyan hospitals, thus contextual gap. The necessities and requirements of doctors from a developed nation like US vary from those from a developing country such as Kenya.

Kavulya, Muturi, Rotich & Ogollah (2018) revealed that the client focus and performance of Saccos are significantly related. The significance of the customer focus is that it stimulates the organization

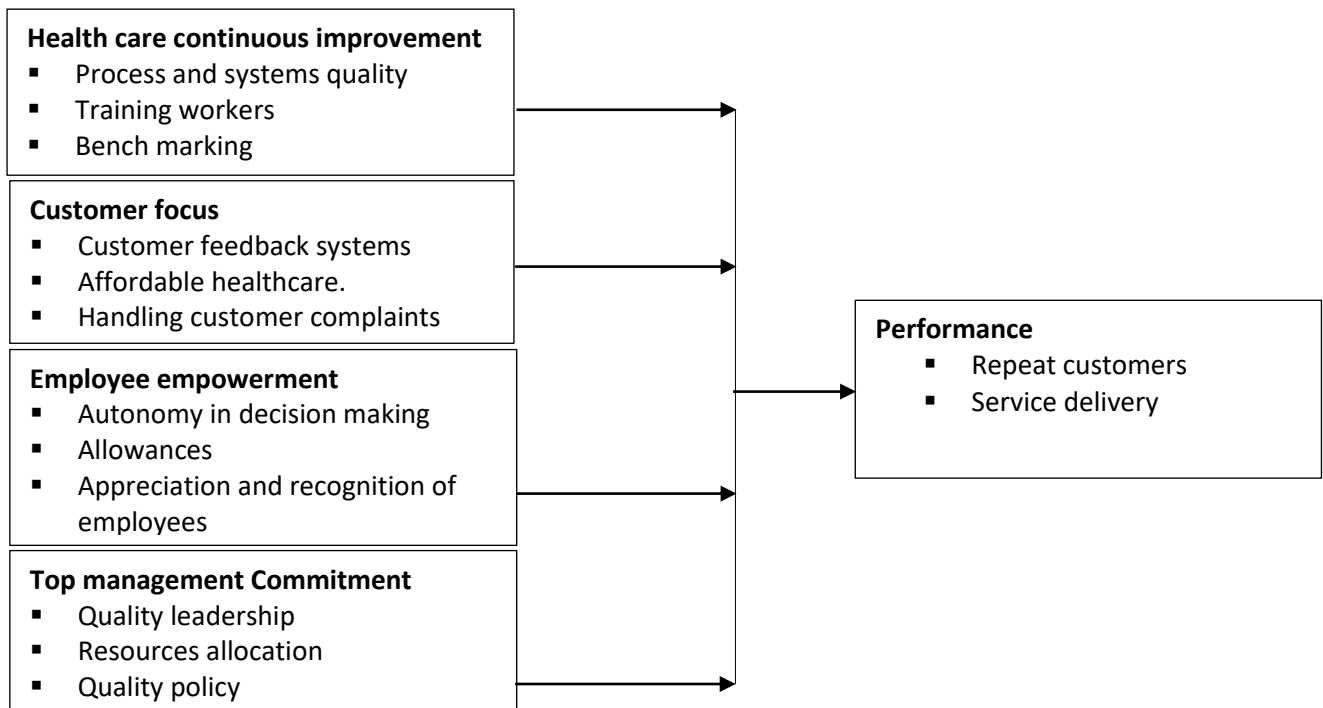
in developing the most effective framework that will be compatible with the clients. More emphasis on the customers can encourage repeat purchases and thus increase the customer base. The most performing organization ensures the customers are satisfied and their grievances are met in the shortest time possible. However, the study presented a methodological and contextual gap because it adopted the descriptive research design and was conducted to SACCOs.

Research was performed by Metcalf, Habermann and Stoller (2018) to ascertain the impact of quality practices and worker empowerment on the performance of hospital units in USA and revealed that employee empowerment is insignificantly associated with performance. The respondents reported that the cost of operation was not influenced by employee empowerment and thus it had no significant impact on the performance. It is

concluded that employee empowerment was negatively related to performance. It is recommended that the hospital is required to create various factors that influence performance.

A study by Mwhia (2020) sought to look at whether to management practices can affect the performance of public hospitals in central Kenya. The outcome of the study showed that performance is positively affected by the management practices. The achievement of the targets of the employees is highly influenced by the management practices. The highly inclusivity of the employees in the decision-making process increases their commitment which translates to higher organizational performance. Conversely, due to the current study's exclusive focus on management techniques, it is unable to draw any general conclusions from it.

Conceptual Framework



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

METHODOLOGY

This study utilised the explanatory research design to explain the relationships of the variables. The targeted population was 303. The unit of analysis included Kilifi level four hospital, Mariakani level four hospital, Malindi level four hospital and Tawfiq level four hospital. The unit of observation incorporated medical officers, Clinical officers, Health records and information officers, Lab technicians, public health officers, Pharmacists, Pharmaceutical technologists, HTS providers, Peer educators and supervisors. A stratified sampling technique was utilised. The respondents were divided into groups (strata) based on their category. Yamane's (1967) formula was used to compute the sample size as follows. The research utilised an unstructured questionnaire to collect the data.

Content analysis was applied to examine the qualitative data and the findings were displayed in writing. Conversely, tables were used to present the quantitative results. The results included both descriptive and inferential statistics. The multiple regression model was as follows;

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$$

Whereby;

Y=Performance

X₁=Health care continuous improvement

X₂= Customer Focus

X₃= Employee Empowerment

X₄= Top Management Commitment

B₀=Constant Term

B₁,B₂,B₃,B₄=Beta Coefficients

ε=Error Term

FINDINGS AND DISCUSSION

Descriptive Analysis Results

The descriptive analysis results were done by means of mean and standard deviation & displayed utilizing tables in accordance with the research variables as follows:

Health Care Continuous Improvement

The descriptive results on health care continuous improvement are exhibited in Table 1.

Table 1: Health Care Continuous Improvement

	Mean	Stan Dev
The hospital has a quality and functional systems	4.13	0.87
There are continuous quality audits in the hospital.	3.85	1.15
The management allows everybody involved in the health care continuous improvement process	4.56	0.44
There is regular benchmarking of the employees to enhance their motivation in this hospital.	4.67	0.33
The employees are allowed to put their suggestions on board.	3.58	1.42
Aggregate score	4.16	0.84

Source: Research Data (2022)

The findings shown in Table 1 suggest that the overall achieved mean score and standard deviation was at 4.16 and 0.84 respectively. This shows that the respondents were in agreement that health care continuous improvement had a relationship with the performance of level 4 hospitals in Kilifi County. The results concurs with Ker, Wang and Hajli (2018) who performed research to determine the impact of health care kaizen on healthcare service improvement in US hospitals and The

study's results indicated that adapting HIS has more potential to reduce the disorders in the outpatient surgery unit and lead to decreasing the period and cost concerning patient flow.

The respondents were in a strong agreement that there is regular benchmarking of the employees to enhance their motivation in this hospital and the management allows everybody involved in the health care continuous improvement process with a mean score of 4.67 and 4.56 respectively and

standard deviation of 0.33 and 0.44 respectively. This means that the hospitals the employees are motivated through benchmarking which enable a mindset and culture of continuous improvement and the hospital management encourages engagement of employees in decision making. The results agree with Ishijima, Miyamoto, Masaule and John (2021) study that sought to examine how the 5S-Kaizen-TQM strategy may enhance the management of healthcare waste in Tanzania and the study established that adopting the 5S-Kaizen-TQM strategy has significantly improved the management of healthcare waste.

The respondents were in agreement that the hospital has a quality and functional systems, there are continuous quality audits in the hospital and that the employees are allowed to put their

suggestions on board as demonstrated by mean score of 4.13, 3.85 and 3.58 respectively and standard deviation of 0.87, 1.15 and 1.42 respectively. This means that the hospitals have well-structured functions which defines clearly job responsibilities, encourages effective communication, increased staff morale, and quicker decision-making. The results are consistent with Shambaro (2017) found that the teamwork concept, upper management commitment, rewards and recognition, and TQM concept substantially affect the performance of maternal child healthcare projects.

Customer Focus

The descriptive results on customer focus are displayed in Table 2.

Table 2: Customer Focus

	Mean	Stan Dev
The hospital management has developed a customer feedback system.	3.02	1.98
The cost of services in the hospital is affordable to the majority of the residents in the county.	4.69	0.31
The hospital has a suggestion box for customer feedback to improve service delivery.	4.21	0.79
The hospital management has developed a policy of immediate handling of customer complaints.	4.52	0.48
The hospital emphasizes offering quality services to all the customers/clients irrespective of their societal, financial, or ideological affiliations.	4.07	0.93
Aggregate score	4.10	0.90

Source: Research Data (2022)

The findings shown in Table 2 implied that the overall achieved mean score and standard deviation was at 4.16 and 0.84 respectively. This shows that the respondents were in agreement that customer focus had a relationship with the performance of level 4 hospitals in Kilifi County. This result is in collaboration with Kavulya, Muturi, Rotich and Ogollah (2018) study findings that revealed that the client focus and performance of Saccos are significantly related. The significance of the customer focus is that it stimulates the organization in developing the most effective framework that will be compatible with the clients.

The respondents were in strong agreement that the cost of services in the hospital is affordable to the majority of the residents in the county and that the hospital management has developed a policy of immediate handling of customer complaints as demonstrated by mean score of 4.69 and 4.52 respectively with respective standard deviation of 0.31 and 0.48. This is an implication that the hospitals offer prices that are affordable to their which has enabled it to increase their client base and hence better performance. The finding agrees with Nderitu (2020) who reported customers focus influence performance positively. The focus on the customers increases their commitment and the repeat of customers. The focus on the customers

further indicates the organization is committed to meeting the customers' goals and needs.

The respondents were in agreement that the hospital has a suggestion box for customer feedback to improve service delivery and that the hospital emphasizes offering quality services to all the customers/clients irrespective of their societal, financial, or ideological affiliations as demonstrated by mean score of 4.21 and 4.07 respectively with respective standard deviation of 0.79 and 0.93. This means that the hospital encourages feedback from their customers by providing enough suggestion boxes. The findings concurs with Maina (2019) study that investigated the influence of customers' focus on the performance of Karen Hospital in Nairobi and the results of the study revealed that

client perception towards hospital costs was not a significant predictor of hospital performance.

The respondents were neutral on the statement that the hospital management has developed a customer feedback system as illustrated by mean score of 3.02 and a standard deviation of 1.98. This finding is in contrary to Kavulya, Muturi, Rotich and Ogollah (2018) study that revealed that more emphasis on the customers can encourage repeat purchases and thus increase the customer base and the most performing organization ensures the customers are satisfied and their grievances are met in the shortest time possible.

Employee Empowerment

The descriptive results on employee empowerment are exhibited in Table 3.

Table 3: Employee Empowerment

	Mean	Stan Dev
There promotion of autonomy in decision making to the employees by the management	4.58	0.42
There is regular annual salary in the hospital	3.67	1.33
There is high employee appreciation and recognition that enhances motivation in this hospital	4.61	0.39
Most employees in the hospital receive promotions after training	4.04	0.96
There is sufficient transport/commuter allowance to all the employees working in the hospital	4.50	0.50
Rewards are given yearly to the most hardworking employee in the hospital	3.99	1.01
Aggregate score	4.23	0.77

Source: Research Data (2022)

The findings shown in Table 3 implied that the overall achieved mean score and standard deviation was at 4.23 and 0.77 respectively. This showed that the respondents were in agreement that employee empowerment had a relationship with the performance of level 4 hospitals in Kilifi County. This means that the hospital has empowered their employees by laying trust on them and motivate them for better performance. This agrees with a research that was performed by Metcalf, Habermann and Stoller (2018) to determine the effect of quality practices and worker empowerment on the performance of hospital units in USA and revealed that employee empowerment is significantly associated with performance.

The respondents were in strong agreement that there is high employee appreciation and recognition that enhances motivation in this hospital, there promotion of autonomy in decision making to the employees by the management and that there is sufficient transport/commuter allowance to all the employees working in the hospital as displayed by mean score of 4.61, 4.58 and 4.50 respectively with respective standard deviation of 0.39, 0.42 and 0.50. This finding concur with Sajld (2019) who performed a research to examine the influence of employee empowerment on employee's performance in private hospitals at Vellore District in India and the findings of the study revealed that employee empowerment was

positively associated to employee performance in private hospitals at Vellore District in India.

The respondents were in agreement that most employees in the hospital receive promotions after training, rewards are given yearly to the most hardworking employee in the hospital and that there is regular annual salary in the hospital as demonstrated by mean score of 4.04, 3.99 and 3.67 respectively with respective standard deviation of 0.96, 1.01 and 1.33. This The results are in line with

research done by Choge (2020) to examine factors affecting employee performance at Kenyatta national hospital and the research results revealed a positive association between working environment, worker empowerment, employee compensation, training and development and employee performance.

Top Management Commitment

The descriptive results on top management commitment are exhibited in Table 4.

Table 4: Top Management Commitment

	Mean	Stan Dev
Top management in the hospital is dedicated to quality leadership.	4.66	0.34
The top management is committed to fair allocation of resources.	4.01	0.99
The top management facilitates employee empowerment.	3.42	1.58
The top management in the hospital is committed to the quality policy	4.59	0.41
The top management enhances the safety of the employees.	3.64	1.36
Aggregate score	4.06	0.94

Source: Research Data (2022)

The findings shown in Table 4 demonstrate that the overall achieved mean score and standard deviation was at 4.06 and 0.94 respectively. This shows that the respondents were in agreement that top management commitment had a relationship with the performance of level 4 hospitals in Kilifi County. This means that the management of the hospitals are is dedicated towards seeing better performance of the level four hospitals within the County. The finding is in line with a study by Mwihia (2020) sought to look at whether to management practices can affect the performance of public hospitals in central Kenya. The outcome of the study showed that performance is positively affected by the management practices.

The respondents were in strong agreement that top management in the hospital is committed to quality leadership and that the top management in the hospital is committed to the quality policy as demonstrated by mean score of 4.66 and 4.59 respectively and respective standard deviation of 0.34 and 0.41. This is an indicator that the management of the level four hospitals ensures

that there quality policies that are used in guiding the operations of the hospitals. The finding concur with Ntwiga, Muchara and Kiriri (2019) study that established that leadership's commitment to executing duties enables the rest of the employees to be more focused and hardworking towards meeting the organization's goals.

The respondents were in agreement that the top management is committed to fair allocation of resources and that the top management enhances the safety of the employees as demonstrated by mean score of 4.01 and 3.64 respectively and respective standard deviation of 0.99 and 1.36. The results agree with Leksono, Siagian and Oei (2020) who reported that top management commitment determined the performance of the organization. In addition, the responsibility indicates that the leaders in the organization are organizations goal-oriented and not self-interested oriented.

Performance

The study aimed at determining the performance of level 4 hospitals in Kilifi County. The descriptive results are exhibited in Table 5.

Table 5: Performance

	Mean	Stan Dev
The service delivery is high compared to other level four hospitals in the County.	4.31	0.69
The quality of the environment is conducive for the customers.	3.73	1.27
Most clients refer their friends, relatives to this hospital	4.45	0.55
The hospital deals with more than expected clients per day	3.77	1.23
Aggregate score	3.97	1.03

Source: Research Data (2022)

The findings shown in Table 5 demonstrate that the overall achieved mean score and standard deviation was at 3.97 and 1.03 respectively. This showed that the respondents were in agreement that top quality management practices had a relationship with the performance of level 4 hospitals in Kilifi County. Craig, McKillop, Huang, George, Punwani and Rhee (2020) states that the death rate in hospitals is one of the critical determinants of the performance within the hospital.

The respondents were in agreement that most clients refer their friends, relatives to this hospital, the service delivery is high compared to other level

four hospitals in the County, The hospital deals with more than expected clients per day and the quality of the environment is conducive for the customers as shown by mean score of 4.45, 4.31, 3.77 and 3.73 respectively. It was noted by Gonzalez (2019) that when the needs of the customers are met, the customers stick to the organization and repeat purchases of the goods or services will increase.

Results of Regression Analysis

Regression analysis was utilised to determine how much the independent factors influenced the dependent variable. The results are exhibited in Table 6, 7 and 8 respectively.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.718 ^a	.844	.841	.199

Source: Research Data (2022)

Table 6 demonstrates the result on adjusted R² indicates that continuous improvement, customer focus employee empowerment and top management commitment explain a factor 0.841 of

the changes in the performance of level 4 hospitals in Kilifi County. This means that other factors that were not studied contributed to 15.9% of the performance.

Table 7: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.052	4	13.351	296.61	.000 ^a
	Residual	7.427	165	.0045		
	Total	47.479	169			

Source: Research Data (2022)

Table 7 provides an illustration of the results. The regression model was very significant in predicting how top management commitment, continuous improvement, and customer focus affected the performance of level 4 hospitals in Kilifi County, as

indicated by the significance value of 0.000a. At a 5% threshold of significance, the F was 296.61. The fact that F calculated exceeded the F critical value (value=13.351) suggests that the entire model was significant.

Table 8: Coefficients

Model	Coefficients (Unstandardised)		Coefficients (Standardised)		
	B	Std. Error	Beta	t	Sig
Constant	0.524	.179	2.927		.000
Continuous improvement	0.679	.034	5.207	19.971	.000
Customer focus	0.706	.027	4.170	26.148	.000
Employee empowerment	0.749	.044	1.827	17.023	.000
Top management Commitment	0.889	0.40	2.342	2.225	.000

Source: Research Data (2022)

The findings of Table 8 implied that by keeping the independent variables (cost leadership strategy, differentiation strategy, focus strategy and strategic alliance) at constant, the performance of level 4 hospitals in Kilifi County will be at a factor of 0.524. In addition, a unit increase in cost leadership strategy will lead to an increase in the performance of level 4 hospitals in Kilifi County at a factor of 0.679. A unit increase in differentiation strategy will lead to an increase in the performance of level 4 hospitals in Kilifi County at a factor of 0.706. A unit increase in focus strategy will lead to an increase in the performance of level 4 hospitals in Kilifi County at a factor of 0.749 and a unit increase in strategic alliance will lead to an increase in the performance of level 4 hospitals in Kilifi County at a factor of 0.889. Therefore, the resulting equation of regression analysis will be as follows:

$$Y = 0.524 + 0.679X_1 + 0.706X_2 + 0.749X_3 + 0.889X_4 + \epsilon$$

Whereby:

Y = Organizational Performance

X₁ = Continuous Improvement

X₂ = Customer Focus

X₃ = Employee Improvement

X₄ = Top Management Commitment

The results in Table 8, further suggests that continuous improvement had a favorable and important correlation with the performance of level 4 hospitals in Kilifi County as observed by the t-values (t=19.971, p<0.05). The results concurs with Ker, Wang and Hajli (2018) who performed research

to determine the impact of health care kaizen on healthcare service improvement in US hospitals and The study's results indicated that adapting HIS has more potential to reduce the disorders in the outpatient surgery unit and lead to decreasing the period and cost concerning patient flow.

Customer focus was revealed to have a favorable and important correlation with the performance of level 4 hospitals in Kilifi County with t-value of 26.148 and significance level less than 0.05 at 0.000. The findings concurs with Maina (2019) study that investigated the influence of customers' focus on the performance of Karen Hospital in Nairobi and the results of the study revealed that client perception towards hospital costs was not a significant predictor of hospital performance.

Employee empowerment was proven to have a favorable and important correlation with the performance of level 4 hospitals in Kilifi County with t-value of 17.023 and significance level less than 0.05 at 0.000. This finding concur with Sajld (2019) who performed a research to examine the influence of employee empowerment on employee's performance in private hospitals at Vellore District in India and the findings of the study revealed that employee empowerment was positively associated to employee performance in private hospitals at Vellore District in India.

Top management commitment was revealed to have a positive and significant relationship with the performance of level 4 hospitals in Kilifi County with

t-value of 2.225 and significance level less than 0.05 at 0.000. The results agree with Leksono, Siagian and Oei (2020) who reported that top management commitment determined the performance of the organization. In addition, the responsibility indicates that the leaders in the organization are organizations goal-oriented and not self-interested oriented.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that the hospitals the employees are motivated through benchmarking which enable a mindset and culture of continuous improvement and the hospital management encourages engagement of employees in decision making. The study also concluded that the hospitals have well-structured functions which defines clearly job responsibilities, encourages effective communication, increased staff morale, and quicker decision-making.

The study concluded that the hospitals offer prices that are affordable to their which has enabled it to increase their client base and hence better performance. The hospital encourages feedback from their customers by providing enough suggestion boxes. Running a customer-focused strategy has enabled the hospitals to build a loyal customer base. Customer focus strategy has enabled the hospital to acquire a tangible segmentation of the hospital's clientele. It has also allowed the hospital to attract the best clients as it simultaneously adapt its strategies according to their needs.

The study concluded that the hospital has empowered their employees by laying trust on them and motivate them for better performance. Employee empowerment has given them the ability to think logically, make decisions based on the circumstances, take charge of their work obligations, and develop their independence. Employee empowerment enhances responsibility and customer service, boosts job happiness, and aids in problem-solving in hospitals.

The study concluded that the management of the hospitals are committed towards seeing better performance of the level four hospitals within the County. The management of the level four hospitals ensures that there quality policies that are used in guiding the operations of the hospitals. Any effective management system must have management commitment to quality. Because they supply the resources for management's implementation and upkeep, the management's dedication to quality is crucial.

The study recommended that the hospitals should ensure that there is effective communication which is a key element for the continuous culture through conveyance of the right message on the right time to enable the employees align with the corporate culture. The hospitals should implement ownership and trust to its employees to enable them balance their freedom to create and develop new ideas with the discipline of accountability and ownership. The study also recommended that the hospitals should create an environment where continuous learning is constantly encouraged.

The study recommended that the hospital management should first identify customer needs and expectations. Seek and promote customer feedback by allowing the customers to share their views of the hospitals on an individual basis. Clear service standards that are easy for staff to understand and follow should be established by hospitals and communicated to them. By looking for methods to streamline customer service procedures at each point of the client's journey, you may provide simple and uncomplicated customer service. Additionally, tailor customer service to better fit clients' demands by giving them access to options for goods and services.

The study made a recommendation for the hospital management to delegate tasks to staff with the aim of enhancing and expanding the knowledge and skills of its workers. Establish clear expectations to enable employees to take initiative while ensuring such decisions are in accordance with the objectives of the firm. Give employees control over their

assignments and thank them for their hard work. The study recommends that hospitals empower their staff members by soliciting their opinions and suggestions, encouraging them to share knowledge and necessary resources, putting their ideas to the test, and supporting the growth of their communication skills.

The study recommended that the hospital management should build better employee-employer relationships by indispensably motivate its workforce, give due credit and recognize a job well done and ensure that the employees are regularly and steadily consulted about critical decisions. Being unambiguous when communicating

project details, such as the deadline and the precise of the product, is important for commitment-based leadership.

Suggestions for Further Studies

The regression model indicated that the variables that were not studied contributed to 15.9% of the performance of level 4 hospitals in Kilifi County. As a result, the research suggests that additional research be done with an emphasis on closing this gap. Further research focusing on the performance of level 5 hospitals in the County should be conducted, according to the study, which also concentrated on the performance of level 4 hospitals.

REFERENCES

- Abdulmouti, H. (2015). The role of Kaizen (continuous improvement) in improving companies' performance: A case study. In *2015 International Conference on Industrial Engineering and Operations Management (IEOM)* (pp. 1-6). IEEE.
- Abubakar, A. H., & Wainaina, L. (2019). Staff Turnover and Organizational Performance of Selected Private Hospitals in Kilifi County, Kenya. *International Journal of Current Aspects*, *3*(17), 309-326.
- Abuga, J. A., Kariuki, S. M., Kinyanjui, S. M. (2019). Premature mortality in children aged 6–9 years with neurological impairments in rural Kenya: a cohort study. *The Lancet Global Health*, *7*(12), e1728-e1735.
- Aburayya, A., Marzouqi, A., Alawadhi, D., Abdouli, F., & Taryam, M. (2020). An empirical investigation of the effect of employees' customer orientation on customer loyalty through the mediating role of customer satisfaction and service quality. *Management Science Letters*, *10*(10), 2147-2158.
- Afriyie, S. O., Kong, Y., Lartey, P. Y., Kaodui, L., Bediako, I. A., Wu, W., & Kyeremateng, P. H. (2020). Financial performance of hospitals: A critical obligation of corporate governance dimensions. *The International Journal of Health Planning and Management*, *35*(6), 1468-1485.
- Ahmad, M. F., Nee, P. S., Nor, N. H. M., Wei, C. S., Hassan, M. F., & Hamid, N. A. A. (2017, October). Total quality management practices practices in Malaysia healthcare industry. In *AIP Conference Proceedings* (Vol. 1891, No. 1, p. 020021). AIP Publishing LLC.
- Akkermans, H. A., & Van Oorschot, K. E. (2018). *Relevance assumed: a case study of balanced scorecard development using system dynamics*. Palgrave Macmillan, London.
- Akkermans, H. A., & Van Oorschot, K. E. (2018). *Relevance assumed: a case study of balanced scorecard development using system dynamics*. Palgrave Macmillan, London.
- Alghamdi, F. (2018). Total quality management practices and organizational performance: A possible role of organizational culture. *International Journal of Business Administration*, *9*(4), 186-200.
- Alshourah, S. (2021). Total quality management practices practices and their effects on the quality performance of Jordanian private hospitals. *Management Science Letters*, *11*(1), 67-76.

- Anastasiadou, S. D. (2015). The roadmaps of total quality management practices in the Greek education system according to Deming, Juran, and Crosby in light of the EFQM model. *Procedia Economics and Finance*, 33, 562-572.
- Anderson, J. C., Rungtusanatham, M., & Schroeder, R. G. (2004). A theory of quality management underlying the Deming management method. *Academy of management Review*, 19(3), 472-509.
- Anderson, J. C., Rungtusanatham, M., Schroeder, R. G., & Devaraj, S. (2005). A path analytic model of a theory of quality management underlying the Deming management method: preliminary empirical findings. *Decision sciences*, 26(5), 637-658.
- Areba, L. N. (2016). *Determinants of successful maternal-child health care programmes implementation in Kilifi County, Kenya* (Doctoral dissertation, University of Nairobi).
- Baashar, Y., Alhussian, H., Patel, A., Alkaws, G., Alzahrani, A. I., Alfarraj, O., & Hayder, G. (2020). Customer relationship management systems (CRMS) in the healthcare environment: A systematic literature review. *Computer Standards & Interfaces*, 7(1), 103-121.
- Bader, V., & Kaiser, S. (2019). Algorithmic decision-making? The user interface and its role for human involvement in decisions supported by artificial intelligence. *Organization*, 26(5), 655-672.
- Barasa, E. W., Cleary, S., Molyneux, S., & English, M. (2017). Setting healthcare priorities: a description and evaluation of the budgeting and planning process in county hospitals in Kenya. *Health policy and planning*, 32(3), 329-337.
- Bortolotti, T., Boscari, S., Danese, P., Suni, H. A. M., Rich, N., & Romano, P. (2018). The social benefits of kaizen initiatives in healthcare: an empirical study. *International Journal of Operations & Production Management*, 6(2), 27-41
- Brooks, C. (2008). RATS Handbook to accompany introductory econometrics for finance. *Cambridge Books*.
- Bryson, J. M., Crosby, B. C., & Bryson, J. K. (2009). Understanding strategic planning and the formulation and implementation of strategic plans as a way of knowing: The contributions of actor-network theory. *International public management journal*, 12(2), 172-207.
- Carnerud, D., Jaca, C., & Bäckström, I. (2018). Kaizen and continuous improvement—trends and patterns over 30 years. *The TQM Journal*.
- Chen, C. T., Liu, C. T., Chen, G. K., Andrews, J. S., Arnold, A. M., Dreyfus, J., ... & Rajkovic, A. (2014). Meta-analysis of loci associated with age at natural menopause in African-American women. *Human molecular genetics*, 23(12), 3327-3342.
- Choge, E. J. (2020). *Factors Affecting Employee Performance in the Health Sector: A Case of Kenyatta National Hospital* (Doctoral dissertation, United States International University-Africa).
- Chong, V. K., & Rundus, M. J. (2004). Total quality management practices, market competition and organizational performance. *The British accounting review*, 36(2), 155-172.
- Chowdhury, M., Paul, H., & Das, A. (2007). The impact of top management commitment on total quality management practices practice: an exploratory study in the Thai garment industry. *Global Journal of Flexible Systems Management*, 8(1), 17-29.
- Cooper, D., & Schindler, P. (2014). *Business Research Methods. Social Research, (12th Edition)*, 792. London: McGraw-Hill Higher Education.

- Cowger, C. D. (1994). Assessing client strengths: Clinical assessment for client empowerment. *Social work, 39*(3), 262-268.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, Vol. 22*(3), pp. 297-334.
- Crowston, K., Rubleske, J., & Howison, J. (1994). Coordination theory: A ten-year retrospective. In *Human-computer interaction and management information systems: Foundations* (pp. 134-152). Routledge.
- Crowston, K., Rubleske, J., & Howison, J. (2015). Coordination theory: A ten-year retrospective. In *Human-computer interaction and management information systems: Foundations* (pp. 134-152). Routledge.
- Dennis, M. L., Benova, L., Abuya, T., Quartagno, M., Bellows, B., & Campbell, O. M. (2019). Initiation and continuity of maternal healthcare: examining the role of vouchers and user-fee removal on maternal health service use in Kenya. *Health policy and planning, 34*(2), 120-131.
- Douglas, T. J., & Judge Jr, W. Q. (2001). Total quality management practices implementation and competitive advantage: the role of structural control and exploration. *Academy of Management journal, 44*(1), 158-169.
- Dubey, R., Gunasekaran, A., Childe, S. J., Papadopoulos, T., Hazen, B. T., & Roubaud, D. (2018). Examining top management commitment to TQM diffusion using institutional and upper echelon theories. *International Journal of Production Research, 56*(8), 2988-3006.
- Duque-Urbe, V., Sarache, W., & Gutiérrez, E. V. (2019). Sustainable supply chain management practices and sustainable performance in hospitals: a systematic review and integrative framework. *Sustainability, 11*(21), 5949, 5967
- Essel, R. E. (2020). Assessing Total quality management practices (TQM) Effect on Hospital Performance in Ghana Using a Non-Probabilistic Approach: The Case of Greater Accra Regional Hospital (GARH). *Metamorphosis, 19*(1), 29-41.
- Farris, J. A., Van Aken, E. M., Doolen, T. L., & Worley, J. (2008). Learning from less successful Kaizen events: a case study. *Engineering management journal, 20*(3), 10-20.
- Fatima, S., & Mahaboob, S. A. (2018). Total quality management practices practices and organizational performance-an MBNQA model-based study of two hospitals. *Sumedha Journal of Management, 7*(4), 27-38.
- Ferreira, D. M. C., & Saurin, T. A. (2019). A complexity theory perspective of kaizen: a study in healthcare. *Production Planning & Control, 30*(16), 1337-1353.
- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics*. Sage: London UK.
- Fingeret, M. C., Nipomnick, S. W., Crosby, M. A., & Reece, G. P. (2013). Developing a theoretical framework to illustrate associations among patient satisfaction, body image and quality of life for women undergoing breast reconstruction. *Cancer treatment reviews, 39*(6), 673-681.
- Förster, J., Grant, H., Idson, L. C., & Higgins, E. T. (2001). Success/failure feedback, expectancies, and approach/avoidance motivation: How regulatory focus moderates classic relations. *Journal of Experimental Social Psychology, 37*(3), 253-260.
- Gabra, S., Yousef, H., & Abood, S. A. (2019). Relationship between Empowerment and Motivation among Staff Nurses in Minia University Hospital. *Journal of Nursing and Health Science 8* (2), 57-64

- Getele, G. K., & Jean, A. T. (2020). Total quality management practices in the healthcare sector: An empirical research from Ethiopia. *Human Systems Management*, 39(3), 441-453.
- Gittell, J. H., & Suchmann, A. L. (2013). An overview of relational coordination adapted from 'New Directions for Relational Coordination Theory'. *Oxford handbook of positive organizational scholarship*.
- Glover, W. J., Farris, J. A., & Van Aken, E. M. (2015). The relationship between continuous improvement and rapid improvement sustainability. *International Journal of Production Research*, 53(13), 4068-4086.
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), 597-606.
- Gonzalez, M. E. (2019). Improving customer satisfaction of a healthcare facility: reading the customers' needs. *Benchmarking: An International Journal*, 2(2), 49-56
- Goyal, S., & Law, E. (2019). An introduction to Kaizen in health care. *British journal of hospital medicine*, 80(3), 168-169.
- Graban, M., & Swartz, J. E. (2018). *Healthcare kaizen: engaging front-line staff in sustainable continuous improvements*. CRC Press.
- Grant, A. M., Fried, Y., & Juillerat, T. (2011). Work matters: Job design in classic and contemporary perspectives.
- Hansen, E. G., & Schaltegger, S. (2016). The sustainability balanced scorecard: A systematic review of architectures. *Journal of Business Ethics*, 133(2), 193-221.
- Harry, K. (2021). Assessment of the Maturity of Research on Kaizen Events in Hospitals. In *IIE Annual Conference. Proceedings* (pp. 292-297). Institute of Industrial and Systems Engineers (IISE).
- Hoque, Z. (2014). 20 years of studies on the balanced scorecard: trends, accomplishments, gaps and opportunities for future research. *The British accounting review*, 46(1), 33-59.
- Hussain, S. T., Lei, S., Akram, T., Haider, M. J., Hussain, S. H., & Ali, M. (2018). Kurt Lewin's change model: A critical review of the role of leadership and employee empowerment in organizational change. *Journal of Innovation & Knowledge*, 3(3), 123-127.
- Ishijima, H., Miyamoto, N., Masaule, F., & John, R. (2021). Improvements to healthcare waste management at regional referral hospitals in Tanzania using the KAIZEN approach. *The TQM Journal* 4(2), 7-31
- Ivelia, L. S. (2018). Influence of training on performance of health workers at kakamega county general teaching and referral hospital, Kenya. *International Journal of Physical and Social Sciences*, 8(11), 100-115.
- Kahnweiler, W. M., & Thompson, M. A. (2000). Levels of desired, actual, and perceived control of employee empowerment in decision making: An empirical investigation. *Journal of business and psychology*, 14(3), 407-427.
- Kaplan, R. S. & Norton, D. P. (2001). *The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive In The New Business Environment*, Boston: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (1992). The Balanced Scorecard—Measures That Drive Performance, *Harvard Business Review* pp 71–79.

- Kaplan, R. S., & Norton, D. P. (2011). The Balanced Scorecard: Measures that drive performance. *Harvard Business Review*, 83(7), 172-180.
- Kaplan, R.S. (2010) Conceptual Foundations of the Balanced Scorecard. *Harvard University Working Paper*. pp 10-074
- Kavulya, P. W., Muturi, W., Rotich, G., & Ogollah, K. (2018). Effect of customer focus strategy on the performance of SACCOs in Kenya. *International Journal of Business Strategies*, 3(1), 1-16.
- Ker, J. I., Wang, Y., & Hajli, N. (2018). Examining the impact of health information systems on healthcare service improvement: The case of reducing in patient-flow delays in a US hospital. *Technological Forecasting and Social Change*, 12(7), 188-198.
- Khomba, J. K. (2011). *Redesigning the Balanced Scorecard model: an African perspective* (Doctoral dissertation, University of Pretoria).
- Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American journal of health-system pharmacy*, 65(23), 2276-2284
- Kithinji, C. M. (2019). *Assessment of health financing factors affecting performance of service delivery at primary health care facilities in Mombasa county, Kenya* (Doctoral dissertation, Maseno University).
- Kok, L., Lebusa, M. J., & Joubert, P. (2014). Employee empowerment in decision-making: A case at one University of Technology in South Africa. *Mediterranean Journal of Social Sciences*, 5(27 P1), 423-423.
- Kombo, D. K., & Tromp, L. A. (2009). *Project and thesis writing: An introduction*. Nairobi: Paulines Publications Africa.
- Koskela, L., Tezel, A., & Patel, V. (2019). Theory of quality management: Its origins and history. In *Proceedings of the 27th Annual Conference of the International Group for Lean Construction* 1381-1390).
- Kothari, C. (2004). *Research Methodology: Methods & Techniques*. 2nd Ed. New Delhi, India: New age International Publishers.
- Kriemadis, T., Thomopoulou, I., & Sioutou, A. (Eds.). (2017). *Ideological Function of Deming Theory in Higher Education: Emerging Research and Opportunities: Emerging Research and Opportunities*. IGI Global.
- Kuye, L. O., & Sulaimon, A. A. H. (2011). Employee empowerment in decision making and firms performance in the manufacturing sector in Nigeria. *Serbian journal of management*, 6(1), 1-15.
- Lala, F., Ndinya, A., Ogada, M., Chepkulei, B., Omido, K., & Apollo, F. (2019). Application of Gemba Kaizen's total quality management practices principle on employee performance in Kenya wildlife service, Tsavo East National Park, Kenya. *International Journal of Development and Management Review*, 14(1), 1-13.
- Landesberg, P. (2009). In the beginning, there were Deming and Juran. *The Journal for Quality and Participation*, 22(6), 59.
- Lane, H., Sturgess, T., Philip, K., Markham, D., Martin, J., & Haines, T. (2018). What factors do allied health take into account when making resource allocation decisions? *International journal of health policy and management*, 7(5), 412.

- Laschinger, H. K., Gilbert, S., Smith, L. M., & Leslie, K. (2010). Towards a comprehensive theory of nurse/patient empowerment: applying Kanter's empowerment theory to patient care. *Journal of nursing management*, 18(1), 4-13.
- Leksono, F. D., Siagian, H., & Oei, S. J. (2020). The Effects of Top Management Commitment on Operational Performance Through the Use of Information Technology and Supply Chain Management Practices. In *SHS Web of Conferences* (Vol. 76, p. 01009). EDP Sciences.
- Leonard, D. J., & Needham, C. (2020). Strategies Hospital Manager Use to Improve Customer Services. *Open Journal of Business and Management*, 8(2), 82-91
- Li, W., Pomegbe, W. W. K., Dogbe, C. S. K., & Novixoxo, J. D. (2019). Employees' customer orientation and customer satisfaction in the public utility sector: The mediating role of service quality. *African Journal of Economic and Management Studies* 5(3), 23-31
- Linderman, K., Schroeder, R. G., Zaheer, S., & Liedtke, C. (2004). Integrating quality management practices with knowledge creation processes. *Journal of operations management*, 22(6), 589-607.
- Lu, Y., Xiang, C., & Wang, X. (2011). What affects information systems development team performance? An exploratory study from the perspective of combined socio-technical theory and coordination theory. *Computers in Human Behavior*, 27(2), 811-822.
- Mang'eli, G. M., & Kilika, J. (2018). Total quality management practices practices and operational performance of Nairobi Bottlers Limited, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(3), 356-374.
- Mason, T. B., Smith, K. E., Engel, S. G., & Wonderlich, S. A. (2021). Examination of momentary maintenance factors and eating disorder behaviors and cognitions using ecological momentary assessment. *Eating disorders*, 29(1), 42-55.
- McClelland, G. H., Irwin, J. R., Disatnik, D., & Sivan, L. (2017). Multicollinearity is a red herring in the search for moderator variables: A guide to interpreting moderated multiple regression models and a critique of Iacobucci, Schneider, Popovich, and Bakamitsos (2016). *Behavior research methods*, 49(1), 394-402.
- Metcalf, A. Y., Habermann, M., Fry, T. D., & Stoller, J. K. (2018). The impact of quality practices and employee empowerment in the performance of hospital units. *International Journal of Production Research*, 56(18), 5997-6014.
- Moons, K., Waeyenbergh, G., & Pintelon, L. (2019). Measuring the logistics performance of internal hospital supply chains—a literature study. *Omega*, 82 (3) 205-217.
- Moore, L. D., Robbins, G., Quinn, J., & Arbogast, J. W. (2021). The impact of COVID-19 pandemic on hand hygiene performance in hospitals. *American Journal of Infection Control*, 49(1), 30-33.
- Mwangi, C. G. (2020). *Influence of Customer Relationship Management Dimensions on Performance of Classified Accommodation Facilities in Coast Region of Kenya* (Doctoral dissertation, KeMU).
- Mwihia, F. (2020). *Performance of Public Hospitals in Kenya: the essential role of management* (Doctoral dissertation, University of Nairobi).
- Mwikali, E. & Bett, S. (2019). Total quality management practices practices and service delivery at the Nairobi Hospital, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(7), 572-589

- Naqshbandi, M. M., Tabche, I., & Choudhary, N. (2019). Managing open innovation: The roles of empowering leadership and employee empowerment climate. *Management Decision* 6(1), 33-48
- Ngabonzima, A., Asingizwe, D., & Kouveliotis, K. (2020). Influence of nurse and midwife managerial leadership styles on job satisfaction, intention to stay, and services provision in selected hospitals of Rwanda. *BMC nursing*, 1(9), 1-11.
- Ngothi, S. (2020). *Effects of kaizen system on the financial performance of manufacturing firms in Kenya* (Doctoral dissertation, University of Nairobi).
- Ngure, K. P., & Waiganjo, D. E. (2018). *Factors influencing retention of health workers in the public health sector in Kenya: A case study of Kenyatta national hospital* (Doctoral dissertation, JKUAT-COHRED).
- Nguyen, P. V., Le, H. T. N., Trinh, T. V. A., & Do, H. T. S. (2019). The effects of inclusive leadership on job performance through mediators. *Asian Academy of Management Journal*, 24(2), 19-42
- Ntwiga, P., N, Muchara, M & Kiriri, P. (2019). influence of leadership commitment on patients' satisfaction within hospitals in Nairobi, Kenya. *International Journal of Research Foundation of Hospital and Healthcare Administration*, 7(1), 33-38
- Nzinga, J., McKnight, J., Jepkosgei, J., & English, M. (2019). Exploring the space for task shifting to support nursing on neonatal wards in Kenyan public hospitals. *Human resources for health*, 17(1), 18.
- Oloo, O., Atambo, W., & Muturi, W. (2017). Effects of Procurement Practices on the Performance of Public Hospitals in Kenya: A comparative study of Hospitals in Homabay and Kisii Counties. *International Journal of Social Science and Information Technology*, 3(2), 1899-1916.
- Olson, G. M., Malone, T. W., & Smith, J. B. (2013). *Coordination theory and collaboration technology*. Psychology Press.
- Otieno, M. (2016). *Resource Allocation to Health Sector at the County Level and Implications for Equity, a Case Study of Baringo County* (Doctoral dissertation, University Of Nairobi).
- Pasaniuc, B., Zaitlen, N., Lettre, G., Chen, G. K., Tandon, A., & Price, A. L. (2011). Enhanced statistical tests for GWAS in admixed populations: assessment using African Americans from CARE and a Breast Cancer Consortium. *PLoS genetics*, 7(4), e1001371.
- Patten, M. L., & Newhart, M. (2017). *Understanding research methods: An overview of the essentials*. Routledge. London
- Perkins, D. D., & Zimmerman, M. A. (1995). Empowerment theory, research, and application. *American journal of community psychology*, 23(5), 569-579.
- Peterson, N. A. (2014). Empowerment theory: Clarifying the nature of higher-order multidimensional constructs. *American journal of community psychology*, 53(1), 96-108.
- Phan, A. C., Nguyen, H. T., Nguyen, H. A., & Matsui, Y. (2019). Effect of total quality management practices and JIT production practices on flexibility performance: Empirical evidence from international manufacturing plants. *Sustainability*, 11(11), 3093.
- Pineno, C. J. (2002). The balanced scorecard: an incremental approach model to health care management. *Journal of health care finance*, 28(4), 69-80.
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5.

- Rahman, M. (2019). A literature review-based analysis of total quality management practices (TQM) implementation towards quality improvement in Bangladeshi hospitals. *International Journal of Progressive Sciences and Technologies*, 17(2), 11-16.
- Ravaghi, H., Alidoost, S., Mannion, R., & Bélorgeot, V. D. (2020). Models and methods for determining the optimal number of beds in hospitals and regions: a systematic scoping review. *BMC health services research*, 20(1), 1-13.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.
- Sajid, S. A. (2019). A Study of Employee Empowerment and Its Impact on Employee's Performance in Private Hospitals at Vellore, Vellore District. *Shanlax International Journal of Commerce*, 7 (3), 21-39
- Saunders M., Lewis P., & Thornhill, A. (2009). *Research methods for business students*. 5th Ed. Pearson professional Limited.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students*. 6th Ed.
- Schallock, R. L., Lee, T., Verdugo, M., Swart, K., Claes, C., van Loon, J., & Lee, C. S. (2014). An evidence-based approach to organization evaluation and change in human service organizations evaluation and program planning. *Evaluation and program planning*, 45, 110-118.
- Schuring, R. W., & Luijten, H. (2001). Reinventing suggestion systems for continuous improvement. *International Journal of Technology Management*, 22(4), 359-372.
- Sekaran, U. (2006). *Research Methods for Business: A Skill Building Approach*. 4th edition, New Delhi-India: John Willey and Sons, Ltd.
- Shambaro, M. G. (2017). *Influence Of Gemba Kaizen'S Principles On The Performance Of Maternal Child Healthcare Projects* (Doctoral dissertation, University of Nairobi).
- Shire, Y. A., & Oringo, J. O. (2020). Total quality management practices Practices and Performance of Public Hospitals in Embu County, Kenya. *Journal of Human resources for health*, 4(2), 14-26
- Sollecito, W. A., & Johnson, J. K. (2013). The global evolution of continuous quality improvement: From Japanese manufacturing to global health services. *McLaughlin and Kaluzny's Continuous Quality Improvement in Health Care*, 3-48.
- Speer, P. W. (2000). Intrapersonal and interactional empowerment: Implications for theory. *Journal of community psychology*, 28(1), 51-61.
- Subedi, D. (2016). Explanatory sequential mixed method design as the third research community of knowledge claim. *American Journal of Educational Research*, 4(7), 570-577.
- Sukdeo, N. (2016). *The role of Total quality management practices (TQM) practices on improving organisational performance in manufacturing and service organizations*. (Dissertation, University of Johannesburg)
- Sultan, W. I., & Crispim, J. (2018). Measuring the efficiency of Palestinian public hospitals during 2010–2015: an application of a two-stage DEA method. *BMC health services research*, 18(1), 1-17.
- Tasi, M. C., Keswani, A., & Bozic, K. J. (2019). Does physician leadership affect hospital quality, operational efficiency, and financial performance? *Health Care Management Review*, 44(3), 256-262.

- Tsai, W. H., Chou, W. C., & Hsu, W. (2009). The sustainability balanced scorecard as a framework for selecting socially responsible investment: an effective MCDM model. *Journal of the Operational Research Society*, 60(10), 1396-1410.
- Turner, S. G., & Maschi, T. M. (2015). Feminist and empowerment theory and social work practice. *Journal of Social Work Practice*, 29(2), 151-162.
- United Nations Inter-Agency Group for Child Mortality Estimation (2020). Retrieved from <https://childmortality.org/data>
- Valentine, K. (2017). Effect of Training and Development on Employee Performance at Kakamega County General Hospital, Kenya. *Journal of Medicine and Public Health*, 6 (1), 79-92
- Vieira, L., Balbinotti, G., Varasquin, A., & Gontijo, L. (2012). Ergonomics and Kaizen as strategies for competitiveness: a theoretical and practical in an automotive industry. *Work*, 41(Supplement 1), 1756-1762.
- World Health Organization (WHO) (2017). Primary Health Care Systems (PRIMASYS). Comprehensive case study from Kenya
- Wu, H., Deng, Z., Wang, B., & Wang, H. (2021). What an online health community participation affects physicians' performance in hospitals: Empirical evidence from China. *Information & Management*, 2(11), 103-124.
- Yousef, N. (2017). Using total quality management practices approach to improve patient safety by preventing medication error incidences. *BMC health services research*, 17(1), 1-16.
- Zaid, A. A., Arqawi, S. M., Mwais, R. M. A., Al Shobaki, M. J., & Abu-Naser, S. S. (2020). The Impact of Total quality management practices and Perceived Service Quality on Patient Satisfaction and Behavior Intention in Palestinian Healthcare Organizations. *Technology Reports of Kansai University*, 62(03), 221-232.
- Zikmund, G.W., Babin, B.J., Carr, C.J. & Griffin, M. (2010). *Business Research Methods*. 8th edition. South-Western, Cengage Learning.
- Zimmerman, M. A. (2000). Empowerment theory. In *Handbook of community psychology* (pp. 43-63). Springer, Boston, MA.
- Zuiderwijk, A., & Janssen, M. (2013). A coordination theory perspective to improve the use of open data in policy-making. In *International Conference on Electronic Government* (pp. 38-49). Springer, Berlin, Heidelberg.