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Quality of work life and employee efficiency in public and private hospitals in Kenya

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ABSTRACT

This study aimed to compare the influence of quality of work life on employee efficiency in public and private level 5 and 6 hospitals in Kenya. A cross-sectional descriptive research design and correlation research design were adopted. Primary data were collected, using structured questionnaires, from 370 respondents, from ten level 5 and two level 6 hospitals in Kenya. Descriptive and inferential statistics were used to analyze data. Hypothesis was tested at 5% significance level. The findings revealed a positive linear significant influence of quality of work life on employee efficiency in both public and private level 5 and 6 hospitals in Kenya. It was therefore concluded that enhancement of quality of work life results in improved employee efficiency in both public and private hospitals in Kenya. The study recommends that both public and private hospitals in Kenya enhance their quality of work life in terms of flexible working arrangements and opportunities for personal career growth in order to boost employee efficiency. The study makes substantial contributions to the existing literature on the quality of work life and employee performance, as well as provide useful input in policy formulation in hospitals.

PUBLIC INTEREST STATEMENT

The Levels 5 and 6 facilities are the highest classifications for hospitals in Kenya. Kenyan hospitals are categorized into six levels (levels 1– 6). The difficult working conditions in Kenyan hospitals have highlighted concerns over worker performance. Level 5 and Level 6 hospitals receive many patients because they also deal with referral cases. Consequently, these two top-tier Kenyan hospitals have higher number of staff and patients compared to lower levels 1 to 4 hospitals. Level 1 through level 5 public hospitals are overseen by Kenya's 47 county administrations, while level 6 public hospitals fall under the national government's jurisdiction. Private and public hospitals have managerial and operational differences due to their nature,

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1. Introduction

Human resources are the unique and most important component of an organization's performance; as a result, businesses cannot function well at the expense of their employees (Martin et al., 2020). Previous research has indicated a growing connection between employee or company success and the quality of their work life. Sudiro et al. (2023) found a positive significant relationship between employee performance and work–life quality. Joao et al. (2019) claim that managers can significantly enhance their staff members' feelings about contributing to the company's success by listening to them, including them in decision-making, showing them respect, and generally providing a pleasant work environment.

Quality of working life is a multidimensional construct that describes unfavourable or favourable job environments for workers. According to Joao et al. (2019), quality of work life entails the importance of subjective and behavioral components of working life and their influence on the formation of the worker's desire to contribute towards strengthening the organization's productivity. According to Akter et al. (2023), quality of work life relates to everything to do with employee well-being, including economic

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rewards, benefits, security, working conditions, institutional and interpersonal relations, and their intrinsic measurement taken by the institution to humanize the work environment. Gaur (2018), identified factors such as opportunities for career growth, nature of job, persons, stress level, challenges, growth and development, risk involved, and reward to influence the quality of work life in organizations. According to Hashmi et al. (2023), factors such as rewards, social relevance of work life, social integration, opportunity for developing using human capacity, opportunity for continued growth and safety and healthy working conditions are some of the qualities of work life factors that drive employees to work well.

Geetha et al. (2022) observed that the critical quality work–life indicators include staff training, rewards and recognition, work–life balance, empowerment, grievance handling, and teamwork. On the other hand, Al-Otaibi (2020) found that salaries and wages, occupational health and security, job satisfaction, opportunities for advancement and career progression, dominant leadership style, and work environment are some of the important dimensions of quality work life in public health institutions in Saudi Arabia. The current study used flexible working arrangements and opportunities for career growth according to Geetha et al. (2022) and Al-Otaibi (2020) as constructs for quality of work life. In hospitals, working conditions are very strenuous; hence, there is a need for flexible working arrangements. It is also the desire of all employees to seek opportunities for career growth and advancement, and hence the choice of opportunities for career growth.

Martin et al. (2020) defines employee performance as how well an employee executes his/her duties and responsibilities. On the other hand, Ogola et al. (2023) view employee performance as the extent to which employees execute their duties and responsibilities. They listed hospital efficiency, the attraction and retention of good employees, and customer satisfaction as measures of hospital performance in public hospitals in Kenya. Similarly, Rahiminezhad and MokhaTab (2022) used employee efficiency as a measure of employee performance. From the reviewed studies, employee efficiency came out as a commonly used measure of employee performance (Ogola et al. 2023; Rahiminezhad & MokhaTab, 2022). Therefore, this study measured employee performance in terms of employee efficiency as a key performance requirement in hospitals, especially in emergency cases. Employee efficiency is a measure of how well a company uses its assets, including cash on hand and labour force, to meet its objectives (Awaah & Olanrewaju, 2023). According to Dwivedi et al. (2020) and Mutegi et al., 2023) employee efficiency is a measure of employee performance that shows the degree of objective achievement given the restricted resources available. Geetha et al. (2022), opines that personnel efficiency is evaluated based on performance standards that include keeping work organized and under budget.

Health facilities known as public hospitals are owned and operated by a nation's federal government, state government, county government, or municipal government. Individuals or businesses own and run private hospitals. In their study of the literature on hospitals, Florien et al. (2018) found that public hospitals had the lowest overall satisfaction and service quality characteristics, with private hospitals coming in second. The study indicates that because the workforce in this industry encounters specific difficulties that could have a detrimental impact on their outputs, enhancing employee performance in both public and private hospitals is getting more and more complicated. Florien et al. (2018) concluded that the majority of studies comparing public and private health providers in Europe showed no variations in the performance of public and private hospitals. Onyango and Wanyoike (2020) claim that COVID-19 disrupted the health sector's workforce and significantly impacted hospital performance due to the stigma engendered by uncertainty and fear in Siaya County, Kenya. The studies on health sector in Kenya have not obtained any conclusive findings relating quality of work life and employee performance in public and private hospitals on a comparative basis. The choice of private and public hospitals was informed by the managerial and operational differences in these sets of hospitals, while the choice of level 5 and 6 hospitals in Kenya was informed by the large numbers of staff and patients in these top-tier hospitals.

As stated in the Social Pillar of Kenya's Vision 2030, the health sector aims to offer all citizens access to high-quality, reasonably priced healthcare. Kenya has advanced significantly in her pursuit of universal health care. One of the four pillars of Kenya Vision 2030 is the health component. Through the creation of human resource development policies that affect the performance of the workforce in the health sector, it seeks to create a wealthy nation with a good standard of living. The government's top priority in Kenya's health sector has been raising employee performance through implementantion of various policy legislations such as; the Human Resource Development Policy, the Salaries and Remuneration

Commission Act, the Occupational Safety and Health Act, the Work Injury Benefits Act, and the Employment Act are among the fully operational employment laws now in effect in Kenya. In addition, the Kenyan health sector has created and implemented a number of programs aimed at enhancing the nation's healthcare infrastructure. These include the National Health Sector Strategic Plan, the Kenya Health Policy Framework, Vision 2030, the Kenyan Constitution, the Kenya National Health Strategy, the Kenya Health Policy Forum, and the Sustainable Development Goals.

Despite the significance of the Kenyan health sector and the government interventions, the sector is still confronted with many obstacles. First, the WHO report (2018) points to numerous healthcare workers leaving the country in search of better working conditions, frequent healthcare worker strikes, a shortage of essential medical staff in several hospitals, inadequate medication and other medical supplies in hospitals, and patient deaths brought on by the carelessness of health care workers, among other problems. Kenya currently has a medical staff-to-patient ratio of 1 doctor, 12 nurses, and 83 midwives per 10,000 people, which is below the WHO's recommended ratio of 23 doctors, 83 nurses, and 154 midwives per 10,000 people. There is a trend of warfare in nations whose populations are expanding quickly. According to the literature analysis, most of the research focused on the performance of employees or organizations in different settings, such as public and private hospitals, separately (Sudiro et al., 2023), but not on comparative basis, especially in Kenya. Comparative studies on performance of private and public hospitals have been done in Europe, which is a different context from Kenya. This study bridged this gap by comparing the efficiency of hospital employees in Kenya's public and private levels 5 and 6 hospitals, as influenced by quality of work life. The choice of private and public hospitals was informed by the managerial and operational differences in these sets of hospitals, while the choice of level 5 and 6 hospitals was informed by the large numbers of staff and patients in these top-tier hospitals. There has been no conclusive research on the relationship between employee efficiency and quality of work life in Kenya, according to the findings of the empirical literature review (Siegel et al., 2021). This suggests that more research needs to be done in this area.

2. Literature review

Theoretical literature and empirical literature related to the study were reviewed.

2.1. Theoretical review

Social exchange theory was used to anchor this study. Blau (1964) postulated this theory. This theory can be explained using the concept of reciprocity. According to Blau, there are two forms of reciprocity: the obligation to reciprocate and expected reciprocity. In the first form of reciprocity, people engage in behavior when they feel obligated to pay someone back. The second is expected reciprocity, where it is believed that a person does something for another when he/she expects something in return in the near future. Blau (1964) argues that employees continually engage in give-and-take relationships with employers where the employer gives a social-emotional resource, in this case, flexible working schemes and personal growth, in exchange for hard work and service delivery. According to Beham (2011), employees act in accordance with the social exchange theory.

According to Emerson (1976), social exchange theory asserts that social associations are embedded within the exchange framework. This suggests that individuals maximize the rewards earned while keeping costs minimal with others. When one party benefits from the other party, they feel compelled to pay back favours to maintain the reward exchange tie. Schots and Taskin (2005) posit that flexible working arrangement provisions satisfy the aspiration of workers to achieve a quality of working life, and workers reciprocate with work attitudes that are more positive in helping the firm achieve its goals. This theory explains the mechanisms by which perceived work flexibility availability promotes anticipated work results. Personal career growth through promotions also prompts employees to work harder and become more efficient. When a firm provides a quality working life to employees, it demonstrates the appreciation of workers' contributions towards the institution and that it cares for their well-being when it offers work flexibility and personal development through promotions. Workers who perceive the availability of flexible working arrangements in their organizations feel obligated to reciprocate and care about the

organization's success, leading to increased organizational commitment and job satisfaction (Jacobs & Gerson, 2004).

The effects of quality work life on the firm versus worker social exchange are more likely to have evidence of basic social exchange theory tenets held in the workplace. Positive gainful happenings directed at workers by the firm or the contribution of representatives in establishing high-quality exchange associations obligate workers to reciprocate positively in a gainful manner. This theory is relevant to the current study because employees are obliged to pay back in return for a quality working life if provided by employers through flexible working arrangements and personal career growth opportunities. The results showed higher levels of job satisfaction and more efficiency at work, which, in turn, improved employee performance. Conversely, the opposite is true when employers do not provide quality work life, in which case employees will not feel obliged to perform well in return. Cropanzano et al. (2017) critique the social exchange theory for overlapping constructs that need to be more clearly distinguished, insufficient appreciation of the positive or negative hedonic value of these various constructs, an assumption of bipolarity that treats negative constructs such as abuse, as the absence of positive constructs like support; and lastly, for theoretically imprecise behavioral predictions of the theory. Despite these criticisms, the theory was valuable in anchoring the study variables of Quality of work life and employee performance because of its direct analogy in give-and-take relationships.

2.2. Empirical literature

Previous studies on the quality of work life and employee performance have been reviewed to expose the research gap. Francis and Michael (2023) conducted a study titled 'Quality of Work Life among Employees in Manufacturing Company in Hosur, India.' They opined that opportunities for development, social support, working conditions, occupational stress, and compensation are crucial factors in the quality of work life that affect employees' performance. The study further reveals that a positive work environment, work–life balance, opportunities for personal and professional growth, valuing employee contribution, fair compensation, and benefits are considered important aspects of quality of work–life that enhance employee efficiency. The study recommended that organizations prioritize quality work life by offering flexible work schedules, telecommuting options, and generous vacation policies to create a positive work environment.

Suyantiningsih et al. (2018) studied the effects of quality of work life and organizational citizenship behavior on employee performance among community health center paramedics in Bekasi City, Indonesia. They established that quality of work life is a significant issue in human resource management that deserves organizational attention since it fosters employees' desire to stay within the organization and enhances employee satisfaction and commitment at work, which translates to organizational performance. A positive statistically significant relationship between quality of work life and employee performance among community health center paramedics was established. The study also revealed that the most critical determinants of quality of work life are job attractiveness, good employee relationships with managers and colleagues, income level, work independence, and career advancement opportunities.

Al-Otaibi (2020) conducted a study on the impact of work–life quality on staff performance at Dawadami Public Hospital in Saudi Arabia. A descriptive research design was adopted, and a stratified random sample of 231 respondents was used. The results found a strong positive correlation between the dimensions of the quality of working life (salaries and wages, occupational health and security, job satisfaction, opportunities for advancement and career progression, dominant leadership style, and work environment) and the performance of employees at Dawadami Hospital. These results indicate that the dimensions of quality of working life have a moral impact on employee efficiency. Similarly, Sari et al. (2019), in a study on the influence of quality of work life on employee performance, as mediated by job satisfaction and work motivation in star-rated hotels in the tourism area of Ubud in Indonesia, established that quality of work life has a positive and significant influence on employee performance, mediated by job satisfaction and work motivation.

A study on the quality of work life in Be Well Hospital in India as conducted by Rajathi and Sivasakthi (2019), involving a sample of 125 respondents, revealed that a high quality of work life is related to a better working environment, which in turn results in organizational efficiency and effectiveness. However,

a low quality of work life is based on an inferior working environment, which reduces an organization's efficiency and effectiveness. The results imply that an improved quality of work life improves organizational performance in terms of effectiveness and efficiency. Similarly, Raeissi et al. (2019), in their study on the quality of work life and factors associated with it among 2391 nurses in public hospitals in Iran, established that the quality of work life for nurses in Iranian hospitals was low. They recommended that nursing managers and policymakers develop and implement appropriate strategies to improve the quality of work life. It was concluded that nurses' quality of work life at Iranian hospitals needed improvement and intervention through improved rewards, managerial support, job security, fair promotion policies, and reduced job stress.

Mishra et al. (2022) conducted a comparative study on the work–life balance of employees working in the government and private sectors in Chhattisgarh, India, using a sample of 210 employees, and established that the quality of work–life of people working in the government sector was significantly higher than that of people working in the private sector. This meant that public hospitals in Chhattisgarh, India, had dealt with issues of quality of work life in a better way than private hospitals, thus pointing to differences in working environments between public and private hospitals.

From the above conceptual, theoretical, and empirical literature, the following null hypothesis was tested:

H_{01}: Quality of work life has no statistically significant influence on employee efficiency in public and private hospitals in Kenya.

3. Methodology

This study adopted positivist research philosophy which is rooted in the belief that knowledge can be systematically derived through empirical observation, measurement, and application of scientific methods. In positivism researchers sought to uncover objective truths and established casual relationships by formulating and testing hypothesis based on existing theory and empirical observation (Park et al., 2021). Descriptive and correlation research designs were adopted. The total targeted population for the study was 13,470 hospital employees (Comprising of Doctors, Nurses, clinical officers, pharmacists, and hospital administrators) from two-level Six and ten level Five hospitals targeted for the study.

As shown in Table 1 Mixed sampling techniques were used to obtain a sample of 370 respondents. In the first stage, level 5 and level 6 hospitals were purposively sampled to be included in the study because they are the top-tier hospitals in Kenya, with many patients' referral cases and a greater number of staff. In the second stage, a convenient sample of 2 level 6 hospitals out of a population of 8 level 6 hospitals, and 10 level 5 hospitals out of a population of 82 level 5 hospitals in Kenya, was included in the study, due to their ease of accessibility and presence of referral persons for ease of data collection. The 10 level 5 hospitals sampled included 6 public and 4 private hospitals, while the 2 level six hospitals were all public hospitals. These selected hospitals were spread across the eight regions of Kenya. In the third stage, five categories of hospital employees who deal with patience cases on day-to-day basis were purposively included in the study. These categories consisted of doctors, nurses, clinical officers, pharmacists and hospital administrators. In the fourth stage, Krejcie and Morgan (1970) table was used to get a sample size of 370 respondents out of a target population of 13,470 hospital employees from the 5 selected categories of hospital employees in the 12 hospitals included in the study. In the final stage, a stratified proportionate sampling technique was used to obtain a sample of respondents from each category of employees included in the study, except for the hospital administrators, where 1 hospital administrator from each hospital was included in the study. The actual picking of data from the 370 respondents was done using convenience sampling technique because of the complex nature of the hospital working environment.

Primary data were collected using structured questionnaires framed on a 5-point Likert scale (1 – Strongly Disagree, 2 – Agree, 3 – Neutral, 4 – Agree and 5 – Strongly agree). The research instrument was pretested and had reliability coefficients of above 0.7 as measured by Cronbach alpha coefficient values. The instruments were also validated by the specialists in the field of study and found to be valid. Descriptive and inferential statistics were used to analyze the data, and the hypothesis was tested at a

Table 1. Sample size per hospital and employee category.

Name of hospital	Doctors	Nurses	CO	Pharmacists	Admin	Total
Level 6 hospitals						
Moi teaching & referral hospital	09	50	05	04	01	69
Kenyatta National Hospital	10	58	04	03	01	76
Level 5 public hospitals						
Embu level five hospital	01	10	00	00	01	12
Machakos level five hospital	01	10	00	01	01	13
Kakamega level five hospital	01	08	00	01	01	11
Mama Lucy Kibaki hospital	01	10	01	00	01	13
Bungoma County Hospital	01	10	00	00	01	12
South B Hospital	01	10	00	00	01	12
Private hospitals						
Medi heal hospital and fertility center	05	30	03	03	01	42
Friends Church Sabatia Eye hospital	04	23	03	03	01	34
Consolata hospital Nkubu	04	26	02	03	01	36
Jumuia Friends Hospital Kaimosi	05	27	04	03	01	40
Total	**43**	**272**	**22**	**21**	**12**	**370**

5% level of significance. The relationship between quality of work life and employee efficiency was represented by the following simple linear regression model: $Y=\beta_0 + \beta_1 X_1 + e$, where: Y is the Dependent variable (Employee Efficiency), X_1 is the independent variable (quality of work life), β_0 is the Constant/y is the intercept which represents employee efficiency in the absence of other variables in the model, β_1 is the Regression Coefficient of Quality of work life, and e the error term of the regression model.

3.1. Informed consent

A written statement of informed consent was sought from the research participants. The informed consent form, clearly explaining the purpose of the study, accompanied the questionnaires, where the participants were requested to willingly consent to participate in the survey; those who accepted signed the informed consent form before proceeding to fill the questionnaires. For patients, the written informed consent form was read to them by the research assistants who assisted in data collection. The informed consent form also provided the avenue for the participants to freely exit the survey if they no longer wished to continue participating in the research process.

3.2. Other ethical considerations

Ethical clearance for the proposed study was obtained from the University of Embu Institutional Scientific and Ethical Review Committee, and a research permit from the National Commission for Science and Technology (NACOSTI) was applied for and granted before data collection commenced. Research participants were assured of confidentiality and anonymity throughout the study including the writing of this article. This study did not involve any material transfer and posed no challenges to national security.

3.3. Data

Primary qualitative data was collected using structured questionnaires that consisted of closed ended questions. Two questionnaires; for healthcare workers and patients were used to collect data on Quality work life and employee efficiency. The questionnaires were developed on a five-point Likert scale of (1 – Strongly Disagree, 2 – Agree, 3 – Neutral, 4 – Agree and 5 – Strongly Agree) that enabled respondents to provide feedback on their extent of agreement with the various statements related to independent variable and dependent variable. The questionnaires contained 13 statements for independent variable and 10 statements for dependent variable, all of which were obtained from literature. A pilot study of 10% of the study sample size was conducted as per Rahman (2023). The validity and reliability of research instruments were tested. Supervisors, who are experts in human resource management, checked on the content and construct validity of the questionnaires. The questionnaires' reliability was calculated using Cronbach alpha coefficient, where the coefficient values for all the variables used in the study were above the threshold of 0.7 (Table 2) for a reliable research instrument, as per Tavakol and Dennick (2011). Questionnaires were issued to a sample of

Table 2. Reliability statistics.

Construct	Sub-construct	No. of items	Cronbach's Alpha	Items deleted	Retained items	Cronbach's Alpha	Comment
Quality of work life	Flexible working arrangements	7	0.921				Reliable
	Personal career growth opportunities	6	0.876				Reliable
Employee Efficiency		10	0.671	EEi, EEii	8	0.705	Reliable

430 respondents consisting of 370 health care workers and 60 patients. Multi-stage and purposive sampling techniques were used. A response rate of 85.6% was obtained. Research assistants were used in data collection through drop and pick method, except for patients, who were assisted by research assistants to fill the questionnaires. The collected data was cleaned, checked for completeness, coded and fitted in SPSS software version 26.0 for data analysis. The data is safely kept by the corresponding author and is only available for the purpose of this study upon a written request to the corresponding author.

3.4. Diagnostic tests

Model diagnostic tests of normality and heteroscedasticity were performed to establish whether the collected data would be fitted using a linear regression model. The skewness statistic used for the normality test resulted in values within the ranges of −3 and +3, indicating that the data collected were usually distributed. The test for heteroscedasticity using residual plots resulted in residuals lying along a straight line, indicating that the data were homoscedastic and fit for analysis using a linear regression model.

4. Findings, discussions and implications of the study

This section presents the study's key findings in the form of reliability results, descriptive statistics, correlation analysis of the study variables, and regression results. The findings are discussed and corroborated with those of previous studies. Finally, the practical and theoretical implications of the findings are discussed.

4.1. Reliability results

Reliability of the study instruments was determined using Cronbach's Alpha Coefficient. The results of Cronbach's alpha coefficients were presented in Table 2. The results presented in Table 2 shows that all items in the questionnaire were highly reliable, with all reliability coefficients as measured by Cronbach's Alpha values being above 0.7. According to Tavakol and Dennick (2011), a Cronbach alpha value of above 0.7 indicates that the research instrument is reliable.

4.2. Descriptive statistics

This section presents a descriptive analysis of the study's variables. Descriptive statistics were calculated for employee performance in terms of efficiency. Furthermore, descriptive statistics for the independent variable Quality of Work Life were obtained, as measured in terms of flexible working arrangements and personal career growth opportunities. A five-point Likert scale was used with the following ranges: 1= strongly disagree (SD), 2= disagree (D), 3= neutral (N), 4= agree (A), and 5= strongly agree (SA) to rate the respondents' extent of agreement with the statements relating to the variables in the study. Appropriate responses for each construct were analyzed using the mean and standard deviation.

4.2.1. Employee efficiency

The results of descriptive statistics on employee efficiency are presented in Table 3. The results in Table 3 show responses to employee efficiency. The aggregate mean was 3.85, with a mean variance of 0.369 for private hospitals, indicating agreement on statements regarding employee efficiency with variations, as indicated by the standard deviation value. For public hospitals, the mean response was 3.55 with a

mean variance of 0.336, indicating agreement with statements regarding employee efficiency with variations, as indicated by the standard deviation value. The highest mean was 4.2, with a variance of 0.834 on the punctuality of employees to duties in private hospitals, and 3.77, with a variance of 0.77, on the timeliness of employees performing procedures in public hospitals. The lowest mean was 3.15, with a variance of 0.587 on reduced customer complaints on service delivery in private hospitals, and a mean of 3.26, with a variance of 0.886 on the urgency in handling customer complaints in public hospitals.

The aggregate mean for combined public and private hospital responses on employee efficiency was 3.67, with a mean-variance of 0.376, showing that in public and private hospitals there was a general agreement that hospital employees were efficient in carrying out their duties. The low and nearly equal mean standard deviations in both public and private hospitals indicate minimal variations in the agreement on various aspects of hospital employee performance. In three aspects that measured employee efficiency, the recorded level of employees' efficiency in both public and private hospitals was below average. These aspects were a reduction in patients' complaints of delayed service delivery in the facility, quickness in response to patients in the facility, and urgency in handling patients' complaints. The mean responses on these three aspects were below 3.5 but above 3.0, which were neutral responses. This implies that although there was an average consensus that hospital employees were efficient in both public and private hospitals, they were still lacking on key issues of employee efficiency in a hospital that would negatively impact the quality of service delivery to patients.

4.2.2. Quality of work life

The results of the descriptive statistics on quality of work life aggregate index are presented in Table 4. Table 4 shows that private hospitals had a mean quality of work life of 3.778 with a variation of 0.579, whereas public hospitals had a mean quality of work life of 2.646 with a variation of 0.889. On average, employees agreed with the quality of work–life standards in private hospitals but disagreed with the same in public hospitals. The variation in agreement on quality work life was higher in public hospitals than private hospitals. The results imply that quality work life standards in private hospitals are slightly better than those in public hospitals. This could be attributed to the fact that private hospitals are profit-making and, therefore, beat the competition by insisting on a better quality of work life in order to present themselves as preferred destinations for healthcare services (Mishra et al., 2022). The disagreement among employees regarding the quality of work–life standards in public hospitals could imply that public hospitals need to clearly communicate and implement quality of work–life standards among their

Table 3. Employee efficiency.

Institution	Private			Public			Total		
Item	N	Mean	SD	N	Mean	SD	N	Mean	SD
Customer (patients) complaints on delayed services delivery have reduced considerably in this facility	101	3.15	0.587	163	3.31	0.758	264	3.25	0.700
There is quick response to patients in this facility	101	3.2	0.523	163	3.45	0.754	264	3.36	0.682
Employees handle customer complaints with urgency in this facility	101	3.26	0.733	163	3.26	0.886	264	3.26	0.828
Response of employees to emergency is of high priority in this facility	101	3.6	0.681	163	3.58	0.708	264	3.58	0.692
Performing a procedure is timely in this facility	101	3.95	0.605	163	3.77	0.77	264	3.84	0.714
Employees are very orderly in this facility	101	4	0.649	163	3.73	0.761	264	3.83	0.727
There is timeliness in admission process in this facility	101	4.11	0.809	163	3.76	0.83	264	3.88	0.832
Procedures are performed with consistency in this facility	101	4.1	0.788	163	3.64	1.055	264	3.81	0.982
There are timely health care services compared to other hospitals	101	3.95	0.848	163	3.42	1.062	264	3.62	1.013
Employees are always punctual in attending their duties	101	4.2	0.834	163	3.66	0.802	264	3.85	0.848
Employee efficiency	101	3.85	0.369	163	3.55	0.336	264	3.67	0.376

Table 4. Quality of work life.

Institution	*N*	Mean	Std. deviation
Private	101	3.778	0.579
Public	163	2.646	0.889
Total	264	3.079	0.958

employees, leading to a lack of clarity on this indicator of quality work–life among public hospital employees.

4.3. Correlations analysis

Correlation analysis was conducted to determine the strength and direction of the relationship between the independent and dependent variables at a 5% significance level. The Pearson product-moment correlation was used to determine the strength and direction of the relationship between human resource management practices and employee performance. A value of ±1 indicates a perfect degree of relationship between the two variables, whereas zero indicates that there is no relationship. The results of the correlation analysis between Quality work life and employee efficiency revealed a positive insignificant relationship between quality of work life and employee performance in private hospitals ($r = 0.173$, $p = 0.083 > 0.05$), but a negative significant relationship in public hospitals ($r = -0.225$, $p = 0.007 < 0.05$). This implies that quality of work life has a clear significant relationship with employee performance in public hospitals but not in private hospitals.

4.4. Regression results for quality of work life and employee efficiency

The objective of this study was to determine the influence of quality of working life on employee efficiency in public and private hospitals in Kenya. The null hypothesis that quality of work life has no significant influence on employee efficiency was tested. The regression results are presented in Tables 5–7.

The simple regression results presented in Table 5 show that the coefficients of determination R^2 for the private and public hospitals models for quality of work life and employee efficiency were 0.015 and 0.124 respectively. This imply that quality of work life accounted for 1.5% and 12.4% of variations in employee efficiency in private hospitals and public hospitals in Kenya, respectively. The remaining variations in employee efficiency are explained by other variables not included in the respective models. The results mean that, quality of work life had influence on employee efficiency in both private and public hospitals in Kenya, though with a more influence in public hospitals compared to private hospitals. Therefore, improvement in quality of work life in terms of flexible working arrangement and personal career growth opportunities would lead to an increase in employee efficiency in private and public hospitals in Kenya.

The results presented in Table 6 show that the fitted simple regression models linking the relationship between quality of work life and employee efficiency in private and public hospitals were statistically significant with (F-Statistic =1.553, p-value = 0.016 < 0.05), and (F-Statistic = 20.051, p-value = 0.000 < 0.05) respectively at 5% level of significance. This implies that the suggested private and public hospital models for prediction of employee efficiency using quality of work life as independent variable, were all suitable for prediction purposes.

The simple linear regression results in Table 7 show that quality of work life had a positive statistically significant influence on employee efficiency in private hospitals, with a regression coefficient of 0.037and a p-value = 0.016 < 0.05, at 5% level of significance. This implies that one unit improvement in quality of work life leads to an increase in employee efficiency by a factor of 0.037 in private hospitals in Kenya. Similarly, for public hospitals, quality of work life had a statistically significant positive influence on employee efficiency, with regression coefficient of 0.050 and a p-value = 0.000 < 0.05, at 5% level of significance. This means that a unit improvement in quality of work life would lead to an increase in employee efficiency by a factor of 0.050 in public hospitals in Kenya. Therefore, quality of work life has a positive statistically significant influence on employee efficiency in level 5 and level 6 hospitals in Kenya. The null hypothesis $\mathbf{H0}_1$

Table 5. Goodness of fit.

Model	*R*	R Square	Adjusted R Square	Std. Error of the Estimate
Private	.124a	0.015	0.118	0.121
Public	.352a	0.124	0.118	0.121

Note: a Dependent variable: Employee efficiency; predictors: (Constant), quality of staff working life.

Table 6. Overall significance of the model.

Model	Source of variation	Sum of squares	df	Mean square	*F*	*p*-value
Private	Regression	0.045	1	0.045	1.553	.016b
	Residual	2.856	99	0.029		
	Total	2.901	100			
Public	Regression	0.292	1	0.292	20.051	.000b
	Residual	2.068	142	0.015		
	Total	2.36	143			

Note: a Dependent Variable: Employee Efficiency b Predictors: (Constant), Quality of Work Life.

Table 7. Individual significance of the model.

		Unstandardized coefficients		Standardized coefficients		
Model	Term	B	Std. Error	Beta	*T*	*p*-value
Private	(Constant)	3.876	0.112		34.582	0.000
	Quality of Staff Working Life	0.037	0.029	0.124	1.246	0.016
Public	(Constant)	3.743	0.031		121.669	0.000
	Quality of Staff Working Life	0.05	0.011	−0.352	−4.478	0.000

Note: a Dependent variable: Employee efficiency.

that there is no statistically significant influence of quality of work life on employee efficiency in public and private hospitals in Kenya was rejected, meaning that improvement of the quality of work life in both private and public hospitals in Kenya, would guarantee a more efficient hospital work force. Based on these results the regression models for prediction of employee efficiency in private and public hospitals in Kenya, using quality of work life as independent variable, were stated as follows;

For private;

$Y = 3.876 + 0.037X_1$, where 3.876 = a constant (the expected estimate of employee efficiency when quality of work life is Zero)

Y= Employee efficiency

0.037 = regression coefficient of quality of work life

X_1 =Quality of work life

For public;

$Y = 3.743 + 0.050X_1$, where 3.743= a constant (the expected estimate of employee efficiency when quality of work life is Zero)

Y= Employee efficiency

0.050 =regression coefficient of quality of work life

X_1 =Quality of work life

4.5. Discussions and contributions of the findings

The regression results for the influence of quality of work life on employee efficiency can be explained in several ways. The findings addressed the practical concerns of the study by showing that quality of work life influences employee efficiency in public and private hospitals in Kenya. The researchers observed that the findings indicate the importance of quality of work life on employee efficiency in public and private hospitals in Kenya. Therefore, the null hypothesis, which states that quality of work life has no statistically significant influence on employee efficiency in public and private hospitals in Kenya, was rejected. Kenyan hospitals can leverage employee efficiency on improved quality of hospitals' working life conditions. In this way, the study contributes to improved policy making by hospital management in order to boost efficiency of the workers.

Further, the results are supported by social exchange theory, which states that people engage in an activity when there is a feeling of being compelled to pay someone back or that a person does something for another when she or he expects something in return in the near future. Blau (1964) argues that employees are continually engaging in give-and take relationships with employers, in this case, where the employer provide flexible working arrangement and personal career growth opportunities in exchange for hard work and improved employee performance. According to Schots and Taskin (2005), flexible working

arrangements provision satisfies the aspiration of workers to achieve quality of working life, and workers reciprocate with work attitude that is more positive in helping the firm in achieving its goals. The findings of the study therefore contribute to strengthening the assertions of the social exchange theory.

A negative significant correlation between quality of work life and employee efficiency in public level 5 hospitals in Kenya ($r = -0.225$, $p = 0.007 < 0.05$) was associated with a low quality of working life in public hospitals in Kenya (mean =2.646) compared to private hospitals whose mean quality of working life was 3.778. This means that the working conditions in public hospitals were not as good compared to private hospitals, hence reducing employee efficiency in public hospitals. The results points to the need for improvement of working conditions in public hospitals in Kenya to enable employees to be more efficient in delivery of their services to patients. The finding differs from those of Florien et al. (2018) whose review of literature on public and private health providers in Europe established that public hospitals were superior to Private hospitals in terms of employee efficiency. The difference in the findings is attributed to differences in economic development of Kenya and Europe, where public European hospitals afford better working conditions compared to Kenyan public hospitals.

The results agreed with (Al-Otaibi, 2020), who found a positive significant influence of quality of work life on staff performance in a public hospital in Saudi Arabia. The study established that measures of quality work life in place support employee commitment and efficiency. The findings are also supported by Rajathi and Sivasakthi (2019), who asserted that a high quality of work life is a better working environment, which in turn results in the efficiency and effectiveness of the institutions. A low quality of work life in place is based on an inferior working environment, which in turn reduces the efficiency and effectiveness of the institution. This assertion can be supported by the descriptive statistics for quality of work life which shows a mean score of 3.778 for Private hospitals, confirming that employees in private hospitals agreed with their quality of work life, which can be attributed to the positive significant relationship between quality of work life and employee efficiency in private hospitals. Therefore, the findings of this study also contribute to the body of existing literature on quality of work life and employee performance.

5. Conclusions

The study findings conclude that the quality of work life in terms of flexible working arrangements and opportunities for personal career growth and advancement positively influences employee performance in levels 5 and 6 public and private hospitals in Kenya. Hospitals that enhance the quality of work life of their employees would have a more efficient workforce and improve the overall performance of the hospital. Further, private hospitals in Kenya had better quality of work life compared to public hospitals, hence the need for enhancement of the quality of working environment in the Kenyan public hospitals in order to enhance employee efficiency.

6. Limitations of the study

The study only included levels 5 and 6 hospitals, leaving levels 1 to 4 hospitals in Kenya. Further, patients were used to rate the average performance of employees in the hospitals in which they were treated, which could not accurately reflect the performance of employees they may have never encountered.

7. Recommendations and suggestions for further research

In conclusion, we recommend that both public and private hospitals in Kenya enhance their quality of working life, including but not limited to; flexible working arrangements and opportunities for personal career growth and advancement, in order to improve employee efficiency.

Further research can be conducted on other elements of work life and how they affect employee performance in public and private hospitals. Studies can also be conducted to determine the effects of flexible working arrangements and career growth and advancement opportunities on employee

performance. Future studies should include level 1 to 4 hospitals. Finally, a factor analysis can be performed to rank the quality of work–life factors that affect employee performance.

Disclosure statement

The authors declare no conflict of interest in this research work

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All authors fully agree to be accountable for all aspects of this research paper and will properly investigate and resolve any questions related to the accuracy or integrity of any part of this this research paper.

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Data availability statement

The questionnaires used for the study responses collected and the analyses of responses are available with the researcher and can be provided by the corresponding author upon request.

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