Influence Of Collaborative Stakeholder Engagement On Industrial Harmony In The Devolved Public Health Sector In Kenya

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ABSTRACT
The health sector in any country is the greatest pillar of wealth generation. The life of citizens and, by extension, the economy depends largely on an effective and efficient healthcare system. A harmonious workplace that guarantees the satisfaction of workers' and employers' aspirations is essential for enhanced service provision in the public health sector. Industrial harmony comprises industrial democracy, employee loyalty, and shared vision. Since the devolution of healthcare services in 2013, the Kenyan public health sector has been affected by frequent short and often localized health workers' industrial actions. The dilemma of the right of employees to industrial action and the citizens' right to health care are two delicate and conflicting constitutional provisions that continue to elude policy and legislative environment. Industrial action is a protected right that every employee enjoys. However, there is a need for a balance between protecting these rights and guaranteeing essential public services to safeguard citizens and their well-being. This study sought to determine the influence of collaborative stakeholder engagement on industrial harmony in Kenya's devolved public health sector. The study used a pragmatic research paradigm. The study research design was mixed-methods research methodology. The study population was 3,355 medical workers in level 5 county referral hospitals in the CEREB. The study selected 351 respondents using stratified random sampling. In addition, 10 medical superintendents, 10 secretary generals from KMPDU and 10 from KNUN were selected for participation in the study through purposive sampling. Data was collected using questionnaires and interviews. Data analysis involved both qualitative and quantitative analysis. Qualitative data collected through the interview guide was analyzed using the content analysis technique. Quantitative data collected using the questionnaire were analyzed using descriptive and inferential statistics. Descriptive statistics comprised means and standard deviation, while inferential statistics comprised simple linear regression to depict the relationship between the study's independent and dependent variables. The study established that collaborative stakeholder engagement positively and significantly influenced industrial harmony (= 0.925, *P*-value = 0.000). The study concluded that collaborative stakeholder engagement enhances industrial harmony. The study recommends expanding the information-sharing system so workers can channel their issues without being victimized and establish effective internal dispute-resolution mechanisms. The devolved healthcare facilities also need to build trust among healthcare workers by being considerate of their work welfare as well as involving them in policy formulation exercises.

KEYWORDS: Collaborative Stakeholder Engagement, Industrial Harmony, Devolved Public Health Sector.

ABBREVIATIONS
WHO: World Health Organization, SDG 3: Sustainable Development Goal 3, SRI: Stanford Research Institute, USAID: United States Agency for International Development, HRH: Human Resource for Health, HRIS: Human Resource Information System, NCDs: Non-Communicable Diseases, CEREB: Central Region Economic Bloc, MS: Medical Superintendent, KMPDU: Kenya Medical Practitioners, Pharmacists and Dentists Union, KNUN: Kenya National Union of Nurses, KNBS: Kenya National Bureau of Standards, CBAs: Collective Bargaining Agreements.

1.0 INTRODUCTION

SDG 3 prioritizes the health and well-being of the people. However, according to WHO, at least 3.9 billion of the world's population cannot obtain essential health services [1]. Russo and Escobedo [2], in the WHO bulletin, identified mismanagement of the healthcare system, lack of commitment, poor leadership and management of the hospitals, and constrained health facilities as challenges that continue to undermine the provision of quality health services and achievement of the SDG 3. Muthuri *et al*. [3] cited that disharmony at the workplace, particularly in developing countries, undermines the provision of quality healthcare. Russo and Escobedo [2] noted that industrial disharmony across 23 low-income countries for the period 2009 to 2018 averaged six industrial actions per year, with the years 2014 and 2018 recording the highest number of episodes at 10 and 17 events, respectively.

Industrial harmony in public healthcare institutions is a critical component of quality service delivery, but many have struggled to operationalize it in practice [4]. According to Kuluski *et al*. [5], public healthcare institutions face immense pressure in terms of service quality expectations and the ability to create a favorable working environment for the workers. Industrial conflicts usually arise due to a breakdown in negotiation as well as disagreements between employer(s) and employees. They connote a temporary stoppage of work resulting from the pursuance of grievance(s) by a given group of workers or when two or more parties have opposing approaches to a particular situation, issue, or person [6]. Nwabueze *et al*. [7] noted that while no health worker likes to engage in industrial action contravening the Hippocratic Oath, they nonetheless do it to demonstrate their grievances related to their well-being, terms and working conditions.

Industrial action includes a cessation of work or a refusal to work or to continue to work by employees, in combination, in concert or accordance with a common understanding. It includes slowdown of work, demonstrations, picketing and work-to-rule or other concerted activities on the part of employees in relation to their work that is designed to restrict or limit output [8]. Izah *et al*. [4] opined that industrial disharmony between employees and employers is common in the public health sector.

Kenya has experienced many longer health workers' industrial actions since devolution in 2013. Between 2013 and 2016, six nationwide industrial actions and many more regional industrial actions [9]. These include that of doctors in 2017, which lasted 100 days and the nurses that lasted 140 days, which was a total of 240 industrial action days in 11 months [10]. There have been many more health workers' industrial actions across counties in Kenya through the years 2018–2020 [11,12]. The inability of the County Governments to prevent industrial actions from occurring or escalating is a demonstration of their limited capacity to manage and negotiate industrial disputes [13]. Industrial actions among health workers have been tied to poor collaborative stakeholder engagement between the government/s and other stakeholders.

Collaborative stakeholder engagement is important for enhancing organizational performance, establishing long-term relationships, and creating value. The role of stakeholders and their relationships with other team members is critical in the harmonious operations of organizations. Collaborative stakeholder engagement aims at assisting a change leader in identifying, understanding, and influencing the impact of external agents in executing organizational objectives, managing risk, and increasing sustainability [14]. It stands for the involvement of various agents or partners in managing a project or undertaking certain tasks in dispute resolution mechanisms, activity coordination, policy formulation, and information sharing [15]. The quality service delivery of medical services in healthcare institutions is a collaborative task; thus, the coordination of medical functions calls for the collaboration of stakeholders.

1.1 STATEMENT OF THE PROBLEM

The health sector in any country is the greatest pillar of wealth generation. The life of citizens and, by extension, the economy depends largely on an effective and efficient healthcare system [11]. The dilemma of the right of employees to industrial action and the citizens' right to health care are two delicate and conflicting constitutional provisions that continue to elude policy and legislative environment [16]. While there is consensus that the right to industrial action is an instrument for the exercise of workers' economic and social rights, there is a need for a balance between the protection of these rights and the need to guarantee essential public services in order to safeguard citizens and their well-being [17].

Industrial harmony in most organizations is, in a way, affected by the increased awareness on the part of employees about their rights and privileges' which reflects a state of organizational instability [18]. Kenya's health system continues to experience many chronic challenges, including industrial actions, drug shortages, understaffing and underfunding, and coordination of health issues in counties, with workers' unions demanding that the health function be reverted to the National Government [19,20]. According to HRH Strategy 2014–2018 [21], the sector faces staff shortages, inequitable distribution, high attrition, especially in hard-to-reach areas, out-migration of health staff, especially nurses and doctors, weak human resources management systems, weak leadership and management capacity, weak HRIS weaknesses in pre-service and in-service training, poor sectoral coordination of the HRH agenda, and low compensation and benefits package.

1.2 STUDY OBJECTIVE

The study sought to determine the influence of collaborative stakeholder engagement on industrial harmony in Kenya's devolved public health sector.

2.0 THEORETICAL LITERATURE AND EMPIRICAL REVIEW OF THE STUDY

2.1 THEORETICAL LITERATURE

The Social Exchange Theory guided the study. The theory, as formulated by Blau [22], is based on the prism that employees perceived organizational support creates a sense of indebtedness and an obligation within an individual to re-pay the organization. The theory explains the interaction of two parties based on cost-benefit analysis to determine risks and benefits. Social exchange reciprocity and indebtedness occur at all levels of the organization and also with immediate supervisors

through reciprocation. Employees' reciprocation is a way of giving back what they interpret to be a fair and kind consideration from the organization and is associated with role behaviors, citizenship behavior, and organizational commitment [23]. Another key behavioral assumption of the theory is distributive justice, equity or fairness in non-economic relations. For instance, a prior relationship between parties can have an effect on the exchange, and the exchange can contribute to the development of continued relationships. This debate is yet to be solved as scholars use the terms; transaction and relations interchangeably [24,25].

Social exchange builds trust among employees toward the organization that it has to fulfill its exchange obligations [26]. Molm [27] describes the leader–member exchange as the cordial relationship between the employee and the supervisor arising out of the perception that the supervisor represents the organization to which the employee is indebted. Social exchange is more associated with role behavior, employees developing personal obligations to undertake extra duties, putting in more time, and minimizing conflicts with supervisors [28]. However, the Social Exchange Theory has been criticized for lacking sufficient theoretical precision and thus having limited utility [29]. Prominent scholars have questioned the degree to which humans are rational and thus make conscious, continuous cost-benefit analyses in their analysis [30]. The theory has also been criticized as it relies more on observations than on studying humans' calculated decision-making and reality and the variability of reward values.

Employees working in the devolved public health sector need to be supported in capacity building and mentorship to support the objectives of the sector. The social exchange has an effect on collaborative stakeholder engagement. According to the theory, justice, equity, and fairness make employees put in extra effort and not leave their organizations. The theory is helpful in understanding the relationship between collaborative stakeholder engagement and industrial harmony in the devolved public health sector.

2.2 EMPIRICAL REVIEW OF THE STUDY

Stakeholders are any group or individuals who can affect or be affected by the achievement of organizations' objectives [31]. The idea of stakeholders originated at the SRI in the 1960s, defining them as those groups without whose support the organization would cease to exist or any group or individuals who can affect or be affected by the achievement of an organization's objectives. Collaborative stakeholder engagement involves various agents or partners managing a project or undertaking certain tasks in dispute resolution mechanisms, activity coordination, policy formulation, and information sharing [15]. Collaborative stakeholder engagement is important for enhancing organizational performance, establishing long-term relationships, and creating value. The role of stakeholders and their relationships with other team members is critical in the harmonious operations of organizations.

Collaborative stakeholder engagement aims at assisting a change leader in identifying, understanding, and influencing the impact of agents in executing organizational objectives, managing risk, and increasing sustainability [14]. The quality service delivery of medical services in the devolved public healthcare sector is a collaborative task, thus calling for the collaboration of stakeholders. It is important for establishing long-term relationships between employees and management of an organization, among team members and promoting harmonious operations in organizations [32]. Stakeholder engagement in the management of public services; supports greater public acceptance, a higher likelihood of intervention success, expanded communication, and increased likelihood of impact on decision-making [33]. However, unchecked collaborative stakeholder engagement may delay decision-making. Nevertheless, the negative impacts should not be taken as a reason to avoid stakeholder engagement but highlight the need for carefully planned, unbiased, and balanced engagement.

Auvinen [14], researching stakeholders' engagement as a success factor for effective occupational health care, established that stakeholders serve an organization and its various actors as a guideline in identifying, planning, and implementing strategies for managing stakeholder relationships to develop occupational health care. However, it is argued that collaborative stakeholder engagement is beyond this and may be expanded to activity coordination and information sharing as in the context of the current study. However, the constructs of collaborative stakeholder engagement in academic research vary among scholars. Thuku *et al*. [34] studying the coordination of health workforce management in the devolved healthcare in Kenya by USAID funding and Intra-Health International, noted that strengthening coordination mechanisms at the national and county levels through stakeholder coordination forums, capacity building, policy formulation, HRH regulation, and provision of standards and collaborative stakeholder platforms helped harmonize HR practices. The two authors argue that stakeholder engagement rotates around shared responsibilities.

Sitienei *et al*. [16] investigated community participation in collaborative governance of primary health care facilities in Kenya by utilizing a multiple case study methodology. The study established that community members participate in decision-making, management, oversight, service provision, and problem-solving. Data was collected through document review, key informant interviews and observations and analyzed through frequencies and percentages. The roles of stakeholders in organizations differ depending on the authority. In healthcare facilities, stakeholders, including facility management and sponsors, have different roles, including conflict management, activity coordination, and information sharing. This study

determined the role of collaborative stakeholder engagement in promoting industrial harmony through the questionnaire and interview schedule.

Wanjau *et al*. [35] while studying the stakeholder perceptions of current practices and challenges in priority setting for NCDs control in Kenya using qualitative analysis identified political leadership, government policies and budget allocation for NCDs, stakeholder engagement, media, and people's cultural and religious beliefs as key stakeholder processes. Accordingly, there is no generally acceptable scope in the applicability of collaborative stakeholder engagement in organizations and, thus, may differ from scholar to scholar based on the contextual use of the term.

Collaboration considers sharing roles and responsibilities among the individuals within a group. Modha [36] studied collaborative leadership with a focus on stakeholder identification, engagement, and ethical leadership in dental clinics. The researcher pointed out that collaborative stakeholder engagement is manifested through shared authority, responsibility, and accountability for a common goal. However, collaborative stakeholder engagement includes information sharing and dispute resolution mechanisms which this study did not consider presenting a conceptual argument.

2.3 CONCEPTUAL FRAMEWORK OF THE STUDY

The study was modeled on the conceptual framework that shows collaborative stakeholder engagement as the independent variable and industrial harmony as the dependent variable. The conceptual framework is as shown in Figure 1.

Figure 1. Conceptual framework.

It was hypothesized that there is no statistically significant relationship between collaborative stakeholder engagement and industrial harmony in Kenya's devolved public health sector. Collaborative stakeholder engagement is important for enhancing organizational performance, establishing long-term relationships, and creating value. The role of stakeholders and their relationships with other team members is critical in the harmonious operations of organizations. Collaborative stakeholder engagement aims at assisting a leader in identifying, understanding, and influencing the impact of external agents in executing organizational objectives, managing risk, and increasing sustainability.

3.0 METHODOLOGY

The study adopted a pragmatic research paradigm. This research paradigm influences the way knowledge is studied and interpreted [37]. Pragmatism argues that knowledge arises from actions, situations, and consequences rather than antecedent conditions [38]. The concern in this paradigm is the application of what works and solutions to problems. Instead of methods being the priority, the problem is most important, and the researcher uses all approaches to understand the problem. This philosophy allowed the study to use quantitative and qualitative inquiry methods. This is because the nature of the constructs being investigated required interpretations to be derived from the subjects of the study in order to gain a deeper and wider understanding [39–41]. Pragmatic paradigm assisted in understanding the influence of affective commitment on the relationship between adaptive leadership and industrial harmony in Kenya's devolved public health sector.

Concurrent mixed-methods research design combined qualitative and quantitative data to draw conclusions. Concurrent mixed-methods research design is a methodology that incorporates multiple methods to address research questions in an appropriate and principled manner [38,42,43]. This method can be used to collect both quantitative and qualitative data. A concurrent mixed-methods design integrates and synergizes multiple data sources, which assists in studying complex problems and allows researchers to seek a wide view of their study by enabling them to view a phenomenon from different perspectives and research lenses [44–47]. The study used a concurrent mixed research method to collect

quantitative and qualitative data in one phase. The data from the interview guide and structured questionnaire were analyzed concurrently.

The study targeted respondents from the level 5 hospitals from CEREB, which comprises 10 counties. The counties include Kiambu county, Murang'a county, Embu county, Nyeri county, Meru county, Tharaka Nithi county, Nakuru county, Laikipia county, Kirinyaga county, and Nyandarua county. The selected counties were representative of the other counties as all counties are governed using the same structures outlined in the Constitution of Kenya 2010 and the County Government Act of 2013. CEREB is the bloc that contributes the largest share of the Country's economy at over 26% of the total National GDP based on data from the KNBS-2020. There have also been major industrial actions in the health sector within the region resulting in dismissals and court cases where for instance, in Laikipia and Kirinyaga counties, there were stand-offs and protracted court battles between the county governments and the trade unions [16,48,49]. Some counties like Laikipia and Kirinyaga permanently sacked some medical personnel because of industrial disharmony.

The unit of observation were the medical doctors, pharmacists, clinical officers, nurses, medical laboratory technologists and technicians, public health officers, radiologists, dieticians and nutritionists', consultants, trade union leaders, and Medical Superintendent. The MS is involved in the day-to-day leadership and management of the level 5 county referral hospitals, whereas the trade union leaders play a critical role in championing their members' rights. Thus, the target population for this study was 3,355 health workers, 10 MS, 10 union officers from KMPDU and 10 from KNUN represented by the secretary general and, in the absence, the chairman. The two unions hold the highest number of unionizable members in the devolved public health sector hence representative of the employees within the sector.

Using Bartlett, Kotrlik and Higgins' table, the study sample size was 351 respondents and was selected using stratified random sampling. Stratified random sampling was appropriate as it ensured equal representation of participants in the study by eliminating any possible bias [50]. Further, through purposive sampling, 10 MS and 20 secretary generals from KMPDU and KNUN were selected for the study. According to Saunders *et al*. [51], purposive sampling requires selecting participants who are knowledgeable about the issue in question, with sheer involvement in and experience of the situation. Primary data was collected using questionnaires and an interview guide. The questionnaires were distributed through drop and pick method by use of well-trained research assistants to the health workers at the county referral hospitals. An interview guide was developed per the study's objectives and administered to MS of the hospitals and the KMPDU and KNUN union officials.

Data analysis involved both qualitative and quantitative analysis. Qualitative data collected through the interview schedule was analyzed using the content analysis technique. Content analysis categorizes phrases, describes the logical structure of expressions and ascertains associations, connotations, denotations, elocutionary forces, and other interpretations [52]. The data were analyzed thematically, presented in narrative and prose, compared and integrated with quantitative results to draw conclusions.

Quantitative data were analyzed using descriptive statistics such as means and standard deviation and presented in the form of tables. Inferential analysis was also carried out using measures such as correlation and linear regression analysis to establish the nature and magnitude of the relationships between the variables [53]. Correlation analysis was carried out to determine the nature and strength of the relationship among the study variables [54]. Regression analysis was conducted using linear regression models to establish the relationship between collaborative stakeholder engagement and industrial harmony in Kenya's devolved public health sector. Normality, linearity, multi-collinearity, and heteroscedasticity tests were also conducted to ensure model test assumptions were considered before running the regression model.

Hypothesis testing was conducted using *P*-calculated values. The acceptance/rejection criterion was that if the *P*-value is >0.05, we accept the $H_{0,}$ but if it is <0.05, the H_0 is rejected. In testing the significance of the model, the study followed the recommendations of Blumberg *et al*. [50] by using the adjusted coefficient of determination *R*-squared (R^2) to indicate the extent to which the variations in affective commitment explain the variation in industrial harmony. *F*-statistic was computed at a 95% confidence level to test whether affective commitment significantly affects the relationship between adaptive leadership and industrial harmony in Kenya's devolved public health sector. If $P < 0.05$, the H_0 was rejected; if $P > 0.05$, H_0 would be accepted.

4.0 RESULTS AND DISCUSSION

This section presents the findings of the study and further discussion.

4.1 INDUSTRIAL HARMONY

Industrial harmony requires that people in management comprehend their responsibilities and are adequately competent with authority to discharge their functions. Employees must understand their duties and responsibilities and be abreast with the

organizational objectives and make progress toward achieving them. The performance of industrial harmony was analyzed and presented in Table 1.

Table 1. Industrial harmony.

Statement	Mean	SD
1. Employees are involved in making crucial decisions pertaining to issues in the hospital.	2.48	1.34
2. Employees are ready to deliver on their obligations to this hospital because the management is conscious of their well-being.	2.40	1.36
3. Joint consultations are regularly held between the management and the workers' representatives.	2.46	1.37
4. Employees are committed to the strategic goals and objectives of the hospital to diligently offer health services guided by morals, competency, and professionalism.	2.45	1.39
5. Performance appraisals are carried out jointly, and matters arising are addressed amicably.	2.43	1.32
6. Employees are willing to stay longer in this hospital because remuneration and other employees benefits address their needs.	2.42	1.33
7. Work committees comprise management and workers' representatives.	2.41	1.44
8. Employees are well equipped with resources, information, and support to cope with difficult situations and setbacks at work.	2.43	1.38
9. Both management and employees focus on delivering quality service in serving clients in this hospital.	2.35	1.30
Aggregate score	2.43	1.36

N = 255.

Item 1 sought to assess whether employees are involved when the sector is making crucial decisions. The results indicate that the sector did not involve employees in decision-making, as depicted by the mean score of 2.48 and a standard deviation of 1.34. The study also established that employees were ready to deliver on their obligations, but the management was not conscious of their well-being, as shown by the mean score of 2.4 and a standard deviation of 1.36. This suggests that the employees feel that their well-being is not a priority in the organization. Item 3 shows that the majority of the respondents disagreed that in industrial democracy, joint consultations are regularly held between the management and the workers' representatives, as depicted by the mean of 2.46 and standard deviation of 1.37.

The results suggest that dialogue between employees and management is not prioritized. When respondents were asked about their commitment to organizational strategic goals and objectives, the majority disagreed that employees are committed to the strategic goals and objectives of the sector to diligently offer health services guided by morals, competency, and professionalism as depicted by a mean of 2.45 and standard deviation of 1.39. On the other hand, the respondents disagreed that performance appraisals are carried out jointly, and matters arising are addressed amicably, as indicated by the mean of 2.43 and a standard deviation of 1.32.

The majority of the respondents did not agree that employees are well equipped with resources, information, and support to cope with difficult situations and setbacks at work, as deduced by the mean score of 2.43 and standard deviation of 1.38. Most respondents disagreed that employees are willing to stay longer in the sector because remuneration and other employee benefits address their needs, as depicted by the mean score of 2.42 and standard deviation of 1.33.

When asked about the composition of work committees, most respondents disagreed that work committees comprise management and employees' representatives, as depicted by a mean score of 2.41 and a standard deviation of 1.44. On the other hand, most respondents disagreed that employees are ready to deliver on their obligations in the sector because the management is conscious of their well-being, as shown by the mean score of 2.40 and standard deviation of 1.36. On the statement on whether employees are well equipped with resources, information, and support to cope with difficult situations and setbacks at work, the majority of the employees disagreed, as shown by the mean score of 2.35 and a standard deviation of 1.30.

Item 9 sought to establish whether management and employees focus on delivering quality service in serving clients in the sector. The results recorded a mean score of 2.35 and a standard deviation 1.30. The results showed that the respondents disagreed that there was cooperation between management and employees focusing on the delivery of quality service to the clients. From the aggregate mean score of 1.43 and a standard deviation of 1.36, it is clear that most of the employees are not satisfied with the interventions undertaken by management toward achieving industrial harmony.

The results in Table 1 revealed that the sector scored relatively low, as depicted by the mean score of 2.43. The highest mean score was on employees not being involved in crucial decision-making processes (mean score = 2.48; SD = 1.34). The statement implies that there is little involvement of employees in decision-making across the sector. This can be explained by the high number of industrial actions witnessed in the sector [11].

4.2 COLLABORATIVE STAKEHOLDER ENGAGEMENT

Collaborative stakeholder engagement aims at assisting a change leader in identifying, understanding, and influencing the impact of external agents in executing organizational objectives, managing risk, and increasing sustainability. Collaborative stakeholder engagement descriptive data are analyzed and presented in Table 2.

Table 2. Descriptive results.

Statement	Mean	SD
1. As one of the conflict resolution mechanisms, negotiation is largely employed in this hospital to address any employment conflicts.	2.17	1.29
2. In case of conflict on any agreed terms of employment between hospital management and employees, mediation by labor unions and the national government is employed.	2.37	1.33
3. Discussions held by health workers' associations, organizations, and hospital management are often fruitful.	2.44	1.44
4. This hospital is responsive to the needs of the hospital employees in terms of communicating any information on time.	2.36	1.40
5. Revision of human resource policies is communicated to health care workers in time.	2.33	1.43
6. Healthcare workers are actively involved in the formulation of human resource policies in this hospital.	2.22	1.36
7. There is timely communication of feedback to employees regarding any work-related complaints.	2.47	1.43
8. Hospital management works hand in hand with employees to resolve any employment conflicts.	2.31	1.36
9. The policies guiding recruitment and remuneration are tied to the needs of health workers.	2.37	1.38
Aggregate score	2.34	1.38

N = 255.

Item 1 assessed the extent to which negotiation as one of the conflict resolution mechanisms is employed in the sector to address employment conflicts. The results recorded a mean score of 2.17 and a standard deviation 1.29. The results in item 2 recorded a mean score of 2.37 and a standard deviation of 1.33. The results showed that the respondents disagreed that mediation by labor unions and the national government is employed in case of conflict on any agreed terms of employment between management and employees. Item 3 assessed whether the discussions held by the health workers' associations and management are often fruitful and recorded a mean score of 2.44 and a standard deviation of 1.44. The results portrayed that the respondents disagreed that discussions held by the health workers' associations and management are often fruitful.

Item 4 recorded a mean score of 2.36 and a standard deviation 1.40. The results show that the respondents disagreed that the management responds to the needs of the employees on time. Item 5 assessed whether the revision of human resource policies is communicated to healthcare workers in time. The results recorded a mean score of 2.33 and a standard deviation of 1.43, showing sector engagement gaps. Item 6 assessed healthcare workers being actively involved in

the formulation of human resource policies in the sector. The results recorded a mean score of 2.22 and a standard deviation 1.36. This low score signifies a lack of engagement between the two parties.

Item 7 assessed the timely communication of feedback to employees regarding work-related complaints. The results recorded a mean score of 2.47 and a standard deviation 1.43. The results showed that timely communication of feedback to employees regarding any work-related complaints is not prioritized. The standard deviation of 1.43 indicates diverse opinions among the respondents. Item 8 assessed whether management works hand in hand with employees to resolve any employment conflicts. The results recorded a mean score of 2.47 and a standard deviation of 1.43, showing that the majority of the respondents were of a different view.

The last item, number 9, assessed whether the policies guiding recruitment and remuneration are tied to the needs of health workers. The results recorded a mean score of 2.37 and a standard deviation 1.38. The results show that the respondents disagreed that policies guiding recruitment and remuneration are tied to the needs of health workers. Policies enacted by organizations are expected to guide the operationalization of institutional activities efficiently and effectively. The aggregate mean score was 2.34 and a standard deviation of 1.40, signifying that the respondents disagreed that collaborative stakeholder engagement existed in the devolved public health sector. Lack of adequate stakeholder collaborative engagement can be the catalyst of the increased industrial action among public health workers working in the devolved public health sector. The majority of the workers feel aggrieved for not being consulted on various decisions that significantly affect their welfare.

4.3 RELATIONSHIP BETWEEN COLLABORATIVE STAKEHOLDER ENGAGEMENT AND INDUSTRIAL HARMONY IN THE DEVOLVED PUBLIC HEALTH SECTOR IN KENYA

The study first undertook tests to determine whether data was fit for further analysis. Some of the tests were a normality test, linearity test, collinearity test, test for homogeneity, and correlation analysis.

4.3.1 NORMALITY TEST

The study employed the Kolmogorov–Smirnov test to determine if the data was fit for regression analysis. According to Ahad *et al*. [55], a *P*-value >0.05 implies that the data is normally distributed and fit to conduct regression analysis. However, a *P*-value <0.05 means the data is not normally distributed and hence not stable for regression model estimation. The finding is presented in Table 3.

Table 3. Normality test finding.

Variable	Kolmogorov–Smirnov		
	Statistic	df	Significance
Collaborative stakeholder engagement	0.113	255	0.72

The findings in Table 3 show that an estimated *P*-value >0.05 for collaborative stakeholder engagement indicates that the study's data set was normally distributed and subsequent inferential analysis could be carried out.

4.3.2 LINEARITY TEST

Compare means were used to test for linearity and visually show whether there was a linear or curvilinear relationship between two continuous variables before regression analysis. Regression models can only accurately estimate the relationship between dependent and independent variables if the relationship is linear [56]. The linearity finding of the relationship between collaborative stakeholder engagement and industrial harmony is presented in Table 4.

Table 4. Linearity results.

Variables		Results	Significance
Industrial harmony × collaborative stakeholder engagement	Between groups	(Combined)	0.000
		Linearity	0.000
		Deviation from linearity	0.612

As shown in Table 4, the sig. deviation from linearity for collaborative stakeholder engagement against industrial harmony was 0.612>0.05. This indicated that the data set was exhibiting a linear pattern; hence linear regression modeling could be conducted since all the linearity tests for the variables were >0.05, and regression analysis could be done.

4.3.3 TEST FOR HOMOGENEITY

In order to meet the assumption of homogeneity of variance, Levene's test was conducted. According to Nordstokke and Zumbo [57], a *P*-value above 0.05 is considered that error variance is uniform across the data set. If Levene's test yields a *P*-value below 0.05, then the assumption of homogeneity of variance has been violated.

From the result presented, the variance of the data set is homogeneous. The Levene statistic was 1.183, and the *P*-value of 0.100. The Levene statistic of the variable is above 0.05; thus, the variance of the error distribution was homogenous across the data set.

4.3.4 CORRELATION ANALYSIS

Pearson's correlation (*r*) was applied to explore the association between the factors, particularly in terms of direction and strength ranging ±1. $r = +0.7$ and above indicates a strong association, $r = +0.5$ to 0.69 indicates a strong association, $r = 0.3$ to 0.49 indicates a moderate association, and $r < 0.29$ indicates a weak association [58]. Where $r = 0$, it indicates that there is no association. Table 5 shows correlation results.

Table 5. Correlation results.

		Industrial harmony
Collaborative stakeholder engagement	Pearson correlation	0.430**
	Significance (two-tailed)	0.000

**Significant at 0.01

Table 6 shows the correlation coefficients between industrial harmony and collaborative stakeholder engagement ($r = 430$, *P*-value = 0.000). These results indicate a moderate and significant correlation between collaborative stakeholder engagement and industrial harmony.

Table 6. Test for homogeneity results.

Variable	**Levene statistic**	**Significance**
Collaborative stakeholder engagement	1.183	0.100

4.3.5 TEST OF HYPOTHESIS

The objective of the study was to determine the relationship between collaborative stakeholder engagement and industrial harmony. The literature review predicted that collaborative stakeholder engagement (information sharing, policy formulation, and dispute resolution) had no statistically significant relationship with industrial harmony. It was hypothesized that;

> $H_0$1: There is no statistically significant relationship between collaborative stakeholder engagement and industrial harmony in Kenya's devolved public health sector.

Simple regression analysis was used to test the hypothesis, as presented in Table 7.

The results in Table 7 show that collaborative stakeholder engagement explained 18.5% of industrial harmony in Kenya's devolved public health sector ($R^2 = 0.185$). The R^2 considers both the significant and insignificant variables that have an effect on the outcome variable in the model. The R^2 is quite low because the model focused on a single predictor leaving out other predictors that would assert more influence on the outcome of the model. According to Bala [59], a low R^2 does not necessarily mean the model is bad as long as the predictors are significant and can offer unique contributions to the outcome of the model. Thus, the findings signified that other factors other than collaborative stakeholder engagement influence industrial harmony in Kenya's devolved public health sector.

The results showed an $F = 57.340$; $P < 0.000$ showing that the model is statistically significant. The calculated *P*-value of $0.000 < 0.05$ indicates that collaborative stakeholder engagement is a significant predictor of industrial harmony in Kenya's devolved public health sector. The results confirm that the overall model is statistically significant in explaining the relationship between collaborative stakeholder engagement and industrial harmony in Kenya's devolved public health sector.

The findings show that the constant had an unstandardized coefficient of 35.231 which means that holding all other factors constant and collaborative stakeholder engagement at zero (0), the industrial harmony level would be equal to 35.231. The *t*-statistic for the constant was found to be 123.013, which was greater than the *t*-critical value (at 152 df and 0.05 significance level = 1.655). The results also show that the standardized beta coefficient for collaborative stakeholder

engagement was 0.430. This means that if all the factors are held constant, a rise in collaborative stakeholder engagement by a single unit leads to a 0.430 rise in industrial harmony in Kenya's devolved public health sector.

The *t*-test statistic for this coefficient was 7.572, greater than the *t*-test critical value (*t*-critical at 152 df and 0.05 significance level = 1.655). The *P*-value for the collaborative stakeholder engagement coefficient was 0.000, which was lower than the 0.05 significance level, which led to the rejection of the null hypothesis that collaborative stakeholder engagement has no significant influence on industrial harmony in the devolved public health sector in Kenya and the conclusion that collaborative stakeholder engagement has a significant influence on industrial harmony in the devolved public health sector in Kenya.

Table 7. Regression relationship between collaborative stakeholder engagement and industrial harmony.

Model summary									
Model	*R*	R^2	Adjusted R^2	Standard error of the estimate	Change statistics				
					R^2 change	*F* change	df1	df2	Significance *F* change
1	0.430[a]	0.185	0.182	4.57350	0.185	57.340	1	253	0.000

ANOVA						
Model		Sum of squares	df	Mean square	*F*	Significance
1	Regression	1199.374	1	1199.374	57.340	0.000[b]
	Residual	5291.975	253	20.917		
	Total	6491.349	254			

Coefficients[a]						
		Unstandardized coefficients		Standardized coefficients		
Model		*B*	Standard error	Beta	*t*	Significance
	(Constant)	35.231	0.286		123.013	0.000
	Collaborative stakeholder engagement	1.255	0.166	0.430	7.572	0.000

[a]Dependent variable: industrial harmony score.
[b]Predictors: (constant), collaborative stakeholder engagement.

The findings indicated that the correlation coefficient between collaborative stakeholder engagement and industrial harmony was 0.185 indicating a moderate and positive correlation between collaborative stakeholder engagement and industrial harmony. The model summary revealed an R^2 of 0.182. The model summary implies that collaborative stakeholder engagement explains 18.2% of industrial harmony in Kenya's devolved public health sector. This shows that stakeholder engagement through various platforms, such as meetings and workshops, helps in restoring industrial harmony. Modha [36] noted that collaborative stakeholder engagement is manifested through shared authority, responsibility, and accountability for a common goal. Interview results with MS, KNUN, and KMPDU officials posted mixed results as the MS reported collaborative stakeholder engagement, whereas the KMPDU and KNUN officials disagreed that there is collaborative stakeholder engagement. The MS reported that there are grievance-handling mechanisms in place. However, the KNUN representatives discredited this argument by saying that management sometimes dictates outcomes leading to legal tussles. The union officials also cited that CBAs are not fully implemented, leading to disharmony and that negotiations are at times affected by

red tape procedures. In addition, they reported that employee satisfaction surveys are carried out, but employees rarely get feedback on such exercises, that information is released selectively, and there is no transparency.

The trade union representatives largely argued that stakeholder engagement on industrial matters had not been fully entrenched in the devolved public health sector in resolving employee grievances. Several issues have hindered this process, including dysfunctional disciplinary committees, bureaucracy, lack of involvement in policy making process, and refusal to engage employees as part of solutions to the challenges affecting the devolved health sector. Overall, the findings of this study compare well with those of other studies. The research findings agree with Auvinen [14], whose study on stakeholders' engagement as a success factor for effective occupational health care established that stakeholders serve an organization and its various actors as guides in identifying, planning, and implementing strategies to develop occupational health care. The findings also concurred with the Thuku *et al*. [34] study, which observed that strengthening policy formulation enhances a harmonious working environment. The current study pointed out this, which established that policy formulation and implementation are vital in achieving industrial harmony.

Wanjau *et al*. [35] studied stakeholder perceptions of current practices and challenges in priority setting for NCD control in Kenya using qualitative analysis. The study identified political leadership, government policies and budget allocation for NCDs, stakeholder engagement, media, and people's cultural and religious beliefs as key stakeholder processes. The findings agree with the current study, showing that stakeholder engagement is key to industrial harmony.

Collaborative stakeholder engagement allows management to empower employees and contribute to the realization of organizational goals and objectives. Empowerment processes may include building capacity and nurturing relationships between employees and management. A cordial working relationship between management and employees will go a long way in creating a harmonious working environment. Thus, there should be renewed collaborative efforts between management and employees. Sitienei *et al*. [16] opined that healthcare facilities, stakeholders, facility management and sponsors have different roles, including conflict management, activity coordination, and information sharing.

Collaboration considers the sharing of roles and responsibilities among individuals within a group. Modha [36] studied collaborative leadership with a focus on stakeholder identification and engagement and ethical leadership in dental clinics. The researcher pointed out that collaborative stakeholder engagement is manifested through shared authority, responsibility, and accountability for a common goal. The current study has established that information sharing, policy formulation, and dispute resolution mechanisms are part and parcel of collaborative stakeholder engagement and contribute to industrial harmony.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The study concluded that collaborative stakeholder engagement enhances industrial harmony. Collaborative stakeholder engagement is key in establishing long-term relationships between workers and management of an organization, among team members and promoting harmonious operations. Collaborative stakeholder engagement aims at assisting a change leader in identifying, understanding, and influencing the impact of external agents in executing organizational objectives, managing risk, and increasing sustainability. The quality service delivery of medical services in healthcare institutions is a collaborative task that brings on board all stakeholders in the sector.

The study established that collaborative stakeholder engagement enhances industrial harmony in Kenya's devolved public health sector. Collaborative stakeholder engagement revolves around shared responsibilities and duties by management and employees in an organization. The study recommends the expansion of communication systems so that employees can channel their issues without being victimized. Expanded communication will bring out issues of concern that may not be disseminated through the common official communication structures. The sector should also establish effective internal dispute-resolution mechanisms. The dispute-resolution mechanisms should have a fair representation, and where decisions arrived at will not be presumed biased.

AUTHOR CONTRIBUTIONS

All authors contributed equally to this study.

CONFLICTS OF INTEREST

None.

ORCID

WBM – not available
AK – not available
EM – not available

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