

The Impact of Industrial Unrest on Selected Performance Outcomes of Health Institutions: A Case of Kiambu County, Kenya

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Abstract: The Constitution 2010 devolved the responsibility of public health service delivery for primary and secondary health services to the counties in order to ensure that health services are brought closer to the citizens and to ensure efficient and effective management of the systems. However, in the years running 2015 – 2017, the health sector was hit by cases of labor unrest to unprecedented disruptions and interruptions in the health care management systems as envisioned in the Constitution 2010. Thus, this study aimed at establishing the impact that industrial unrest has had on the public health sector. The study adopted a descriptive – correlation and causal research design and targeted the health sector employees and administrators from Kiambu County. The data was analysed and specific statistical tools adopted included percentages, frequency, mean, standard deviation and analysis of variance (ANOVA). The study established that the frequency of industrial unrest was more after devolving the management of the health sector and further established that industrial unrest has a high impact on the production efficiency and a low impact on organizational resources management, human resource management and social accountability and reactivity. Consequently, the study recommends that systems, measures and policies should be instituted to help address the various elements of the public health sector as assessed in the study.

Keywords: Healthcare management; industrial action; labour relations or industrial relations; medical services

I. INTRODUCTION

Beardwell and Claydon (2007) asserts that human involvement with organizational frameworks through the provision of labour force is the result of organizational policies intended to impact organizational performance. However, these policies equally affect the labour force of an organization from all dimensions in that they can either lead to satisfaction or dissatisfaction of the human labour force (Beardwell&Claydon, 2007). Thus, it is an established fact that human resource can be the deciding factor for an organization's performance and success (Nyakwara, Shiundu, &Gongera, 2014). BeardwellandClaydon (2007), suggests that an organization can obtain meaningful and long-lasting success through the correct handling of its human resources. On the other hand, Aubrey (2006), opines that organizational policies can be key determinants to the success and achievement of its employees' aspirations and goals in life and; when employees feel that their needs are not being adequately

met, they tend to develop negative attitudes towards work and or the organization they work for, and eventually industrial conflict or unrest (Lunenburg, 2011). This can have a long-lasting impact on the performance of the organization.

The right to strike is recognized as a fundamental human right by the United Nations, the Council of Europe, and the European Union. Most European countries enshrine the right to strike in their national constitutions, (Oleribe, Ezieme, Oladipo, Akinola, Udofia, Osita-Oleribe, & Robinson, 2016).Industrial unrest involve the collective withholding of labour/services by a group of workers for the purpose of extracting certain concessions or benefits, and are usually intended for the economic benefits of the strikers, (Oleribe, et al., 2016).Industrial or labour unrest has for a long time been a concern issue for most organizations all over the world (Aminul, 2011). When employees within an organization persistently fail to realize those goals and objectives in life that are tied to their work place, then they will tend to develop a negative attitude towards their work and or employer (Aubrey, 2006). This eventually leads to industrial or labour unrest.

Industrial unrest in the US can be traced back to the 19th century especially between 1880 and 1900 where over 20,000 strikes and other forms of unrest were experienced (Conzen&Thale, 2005). Most notable was the 1886 Chicago industrial action where workers throughout Chicago and its suburbs took part in the nationwide movement for an eight-hour day with strikes, meetings, and parades in early to mid-1886 (Avrich, 2004). About 10 years later, in 1887, the US again experienced another nationwide labour unrest which was precipitated by a wage cut for workers on the Baltimore and Ohio Railroad, spread quickly to lines east of the Mississippi River and as far west as San Francisco (Schneirov, 1998). By the time it was over, over 100 people had lost their lives and property worth over 10million dollars had been destroyed. In the UK, between 1910 and 1914, Britain experienced a wave of industrial unrest. Wage cuts, poor working conditions, and rapid inflation (Schneirov, 1998). Between 1889 and 1910, the cost of food had risen by 10 per cent and the cost of coal 18 per cent, leaving the workers deprived and disgruntled. Various trade unions were formed and their membership increased in size and in 1911 there were

major widespread strikes (Avrich, 2004). The most significant of these were in Liverpool, where a successful strike among sailors inspired a summer of strikes throughout the city's other industries (Avrich, 2004, Nyakwara et al., 2014).

During the advent of the industrial age, Africa experienced sporadic and spontaneous cases of industrial unrest (Nyakwara et al., 2014 citing Nsowah, 2013). According to Nyakwara et al., (2014), while citing Nsowah (2013), and Yaw (2013), in Ghana, industrial action has been a major cause of economic setbacks in the country dating back to the era of industrial advent. Yaw (2013), states that strike actions by workers started long before independence in Ghana. One of such major labourunrests that hit Ghana in the 70's was recorded in 1971 which took the form of two strikes. One was by timber workers against a timber concern which developed into riots that resulted in the shooting of three workers. The other one was a ten-day strike by railroad engineers and workers which led to Trade Unions Congress demanding that minimum wages be doubled (Nyakwara, et al., 2014 citing Yaw, 2013). Nyakwara et al., (2014), citing Nsowah (2013), also notes that the famous strike embarked upon by the University Teachers Association of Ghana (UTAG) from 1994 to 1995 disrupted the academic calendar of universities and its attendance backlog of students. In South Africa, industrial unrest became apparent to the white settlers who had conquered the blacks in South Africa (Newman, 2012). During this colonial period, the whites owned most of the rich resources that were formally owned by blacks and the blacks were turned into workers on the white man's land where they earned meagre wages (Tabata, 1973). Tabata (1973), states that over time, the disgruntled blacks formed groups where they would meet to discuss their plight after rejecting the Trade Union Council of South Africa (TUCSA). The history of industrial unrest in East African countries is relatively not documented with only the most recent cases of industrial unrest receiving major attention both in the media and other economic forums. In Kenya, there have been spontaneous industrial unrest cases in the recent past, most notably in the early 21st century with most of these unrest cases involving employees and the government (Atwoli, 2003).

The Kenyan health sector is not alien to labour unrest. However, over the last 5 - 7 years the frequency and intensity of labour unrest in the sector appear to have increased. The promulgation of the Constitution of Kenya 2010 (Constitution of Kenya Review Commission, 2010), which in Article 37 states that every person has the right, peaceably and unarmed, to assemble, to demonstrate, to picket, and to present petitions to public authorities, came with expanded employee liberties that allowed hitherto non-unionisable groups to organize into labour unions as provided for in Article 4 of the Labour Relations Act 2007 (National Assembly Kenya Legislature, 2011)

With the advent of devolved of health services, labour unrest has been encountered at National and County level among various cadres of public health workers, with as many

indicating intent to engage in future labour unrest. These labour actions have paused significant disruption to delivery of health services by directly withdrawing health workers from the critical services, disruption of action plans geared towards achieving specific health outcomes and possible reallocation of resources that would be necessary for the realization of these outcomes.

General media and published information have highlighted the visible effects, including rumours, of the industrial unrest on the actual delivery of health services (Njuguna, 2015; Nation Media Limited, 2015; Lancet, 2017). However, little has been published on the impact of these labour disputes on specific health outcomes, particularly critical ones like maternal, newborn and child health, which have in recent years received heightened local and global attention and concomitant investment.

The Kenyan healthcare system can be split into three subsystems: the public sector, commercial privatesector, and faith-basedorganizations (FBOs) with the public sector being the largest in terms of the number of healthcare facilities, followed by the commercial private sector and the FBOs. There is a large disparity among these health facilities, especially in rural areas. In 2013, the public health services (primary and secondary level) moved from the national government and Ministry of Health (MOH) to the county governments.

Every established government regime desire to have a much healthy and wealthy citizenship. Thus, it is a desire of every government to provide an effective health care management system. In 2010, the revised Kenya Constitution devolved the responsibility of public health service delivery for primary and secondary health services to the 47 counties while the national MOH provides policy support and technical guidance to priority national programs and stays in charge of the national referral hospitals and remains responsible for HR for health (university teaching hospitals, public universities and medical schools). However, over the past few years particularly in the years running 2015 – 2017, the health sector has been hit by a myriad of labor unrest from the major medical and paramedical staffs with most cases being strikes by doctors, nurses and the clinical officers leading to unprecedented disruptions and interruptions in the health care management systems and the provision of efficient and effective services as envisioned in the Constitution 2010. Despite the fact that industrial unrest has been experienced at both the national and the county levels in Kenya, there seems to be very limited documentation of research done on the aspect as particularly on the impact of the unrest on the performance of the health sector in Kenya and specifically within the devolved governance structure and regime. Consequently, this study aimed at assessing the impact of industrial unrest on the healthcare management outcomes in Kiambu County since October 2010 after the promulgation of the Constitution of Kenya 2010 and pursued the following set of objectives

1. To establish the extent to which industrial unrest have been experienced in the public health sector in Kiambu County?
2. To identify the impact of industrial unrest on the production efficiency, the management of organizational resource, the management of human resource, and the social accountability and reactivity of the public health facilities.

II. THEORETICAL REVIEW

Minvielle et al., (2008), asserts that the mission of any hospital is to provide specific health services, which can solve the patients' health problems (efficacy) in the best manner (quality) and in the most economical way possible (efficiency). Since performance actually refers to efficacy, efficiency and quality, being aware of the performance of the hospital means nothing but an understanding of the way it fulfil its mission. Being aware of the performance of the hospital becomes even more important if the fact is considered that it must permanently adapt to an external environment that undergoes continuous change, so as to fulfil its mission even in the newly emerging contexts.

The new situations that the hospital has to deal with may be determined by various causes, such as: the development of new health policies or the emergence of new orientations and tendencies (increase in the hospital's social responsibility, increase in the interest for the quality of healthcare services), changes in the demand for hospital services or in the services supply competition, changes in medical technologies, etc. However, success in adapting to new situations can only be assessed by a change-based comparison, namely, performance before the change and performance after the change. According to Minvielle et al., (2008), this new approach has led to the elaboration of a variety of methods for the assessment of performance in health systems. They further argue that many of these methods proved to be unsatisfactory because they used only one variable, one single KPI, and in many cases the result was distorted. The systems of indicators, discovered while searching information on the management of performance in hospitals revealed the existence of several main dimensions most frequently used to measure hospitals' performance such as:

1. Clinical efficiency through technical quality and practice;
2. Efficiency in using and attracting resources, with an important component related to the financial management of the hospital;
3. Orientation towards continuity together with positive response to the needs and demands of the community;
4. Safety provided through high quality, ensured throughout the entire flow of relations with the suppliers, patients and with the whole community;
5. Orientation focused on patients in order to get them fully satisfied.

The Concept of Industrial Action/Unrest

History of labor unrest is as old as history of industrialization. The history of the Industrial Revolution in England in late 18th century records the plight and struggle of working-class people who were to work for long hours in an unhygienic environment for a low wage. Frederick Engels (1996) comments, "in truth, they were not human beings; they were merely toiling machines in the service of the few aristocrats who had guided history down to that time." Frederick further says, intellectually, they were dead; lived only for their petty, private interest, for their looms and gardens, and knew nothing of the mighty movement which, beyond their horizon, was sweeping through mankind". However, in course of time, government realized the importance of workforce and adopted intervention strategies through policies such as increasing wages, limiting working hours, providing trainings, establishing day care centers and schools for the children of the workers etc. and thus made an industrial revolution possible. Further, the establishment of ILO in 1919 provided a source of inspiration for the workers to organize themselves and shape their destiny.

In Africa, industrial unrest was mainly experienced through the revolution that ousted the white man from management of resources owned by the black and brought freedom and independence back to the blacks. However, cases of industrial unrest are rampant in most African nations, most taking a worse and organized form than it was during the fight for freedom and independence period. Apparently, African governments have for a long time been innovating strategies intended to avert industrial unrest but have realized very minimal success. It is against this backdrop that this study seeks to isolate the various industrial unrest intervention strategies that have been formulated by various organizations, some of which have successfully managed to avert industrial action in the host organizations while others have not.

Strike action is only one manifestation of industrial conflict; however, because of its overt and collective nature, it has a higher profile and is more discussed than other examples of conflict (Rigby & Marco, 2009). As pointed out by Blyton and Turnbull (2004), strike statistics provide only a partial view of collective industrial conflict. Strike includes a cessation of work or a refusal to work or to continue to work by employees, in combination, in concert or in accordance with a common understanding, a slowdown of work or other concerted activity on the part of employees in relation to their work that is designed to restrict or limit output. Ankomah (2010), observes that strike is a concerted withholding of labor supplying order to bring economic pressure to bear upon the employees and /or the unions demand. It is simply a refusal by employees to work. Consequently, work stoppages involving nursing personnel have the potential to significantly disrupt hospital operations, with potentially serious consequences for patients. Furthermore, the complex nature of health care delivery necessitates the close coordination of workers who exhibit a great degree of interdependence (Cebul, 2008) and

whose tenure in a hospital unit can affect patient outcomes (Bartel, 2009). Healthcare institutions may thus be particularly susceptible to labor unrest that disrupts these complex processes. A change in the intensity and quality of nursing inputs brought about due to strikes also has the potential to adversely affect patient outcomes. A number of studies have suggested that a decrease in the nurse-to-patient ratio is associated with increases in mortality and other adverse inpatient events (e.g. Aiken, 2002; Needleman, 2002), though recent work by Cook (2010), suggests that legally mandated increases in nurse staffing at California hospitals had no discernable effect on patient safety.

Moreover, even if staffing ratios are maintained during a strike through the use of replacement workers, the quality and familiarity of these replacement workers with hospital processes may affect the care delivered to patients during strikes. For example, the results in Aiken (2003), suggest that higher quality workers (as measured by education level) are associated with lower mortality rates, while Phibbs (2009), document increases in length of stay for hospitals employing temporary contract workers.

According to Hardiningtyas (2007), industrial action refers collectively to any measure taken by trade unions or other organized labor meant to reduce productivity in a workplace. While citing Rood (2001), Nyakwara et al., (2014), asserts that industrial action may take place in the context of a labor dispute or may be meant to effect political or social change. According to Velden (2006), as cited in Nyakwara et al., (2014), industrial action is portrayed when employees perform work in a manner different to how it is normally performed, employees adopting a practice that restricts limits or delays the performance of work, ban, limitation or restriction by employees on performing or accepting work, a failure or refusal by employees to attend work or perform any work the lockout of employees from their employment by their employer thus affecting the normal work routine and the provision of quality services.

Industrial action by doctors is, however, complicated by their professional values and ethical framework. Most strikes are effective because they harm a neutral third party, who is then motivated to pressure the employer to accede to strike demands. Unfortunately, when doctors and nurses strike, the patients happen to be the third party. Many may argue that such behavior is inconsistent with the over-riding duty of doctors and nurses to advocate for their patients. Others have claimed that doctor and nurses strike inevitably expose patients to risk of serious harm. The situation may be further complicated by doctors and nurses striking to oppose policies that are perceived to threaten the standard of care they are able to deliver. Strikes by doctors highlight the conflict between doctors' rights as employees and their duty to patients.

In the public health sector, pretty much of the reasons why health workers embark on strike actions rest on pay issues. Health workers have over the years been dissatisfied with

their working conditions and pay which they perceive as low and leading to a fall in their living standard. Apart from the low level of pay, one critical issue is the unfairness in the health sector pay. Some professional groups are given preferential and better treatment when it comes to pay and conditions of service even though health service delivery is considered as a team work. This practice has had a demoralizing effect on other health workers and serves as a precipitating factor for strike actions in the public health sector. Barnard and Harrison (2006), pointed out that the sit-down strike may be caused by workers feeling that their pay is not sufficient to provide their families with a reasonable standard of living. Workers are not only concerned with the levels of their pay but equally importantly, they are concerned about relative pay because they are key indicator of social status and esteem for workers. These explain why workers and their unions are so passionate about pay related issues. In the public health sector, pretty much of the reasons why health workers embark on strike actions rest on pay issues. Health workers have over the years been dissatisfied with their working conditions and pay which they perceive as low and leading to a fall in their living standard.

III. HEALTH SECTOR MANAGEMENT PERFORMANCE OUTCOMES

Schneider and Schmitt (1986), define performance criteria as 'those behaviors and outcomes at work that competent observers can agree constitute necessary standards of excellence to be achieved in order for the individual and the organization to both accomplish their goals.' A similar definition of performance is provided by Campbell et al. (1990), as indicative of the value attributed to particular behaviors by an organization that leads to the attainment of important organizational goals. Campbell et al. stress that performance is thus more than simply behavior, it is behavior imbued with significance and value by an organization because of what it leads to. Performance occurs in the context of a job, position or role in an organization which they argue, can be differentiated from the outcomes of performance. Performance is not the consequence or result of the job behavior, but it is the act itself (e.g. preparing a tender document). The consequences of performance may not ultimately reflect the unique contributions of one particular employee (e.g. the tender document). Many factors influence performance outcomes, some of which are not under the control of the individual employee (e.g. lack of appropriate tools or resources, financial considerations).

According to Minvielle et al., (2008), performance has become a well-known term in the industry of health services. Performance represents the extent to which set objectives are accomplished. The concept of performance in health services represents an instrument for bringing quality, efficiency and efficacy together. Consequently, the concept of performance is a multidimensional one, covering various aspects, such as: evidence-based practice (EBD), continuity and integration in healthcare services, health promotion, orientation towards the

needs and expectation of patients. Minvielle et al., (2008), further asserts that the mission of any hospital is to provide specific health services, which can solve the patients' health problems (efficacy) in the best manner (quality) and in the most economical way possible (efficiency). Since performance actually refers to efficacy, efficiency and quality, being aware of the performance of the hospital means nothing but an understanding of the way it fulfill its mission. Being aware of the performance of the hospital becomes even more important if the fact is considered that it must permanently adapt to an external environment that undergoes continuous change, so as to fulfill its mission even in the newly emerging contexts.

The new situations that the hospital has to deal with may be determined by various causes, such as: the development of new health policies or the emergence of new orientations and tendencies (increase in the hospital's social responsibility, increase in the interest for the quality of healthcare services), changes in the demand for hospital services or in the services supply competition, changes in medical technologies, etc. However, success in adapting to new situations can only be assessed by a change-based comparison, namely, performance before the change and performance after the change. According to Minvielle et al., (2008), this new approach has led to the elaboration of a variety of methods for the assessment of performance in health systems. The systems of indicators, discovered while searching information on the management of performance in hospitals revealed the existence of several main dimensions most frequently used to measure hospitals' performance. Such dimensions include among others clinical efficiency, production efficiency, personnel efficiency, social accountability and reactivity, safety and focus on patients (WHO, 2003)

It may be thus stated that measuring the hospital performance is intrinsically connected to the following dimensions: (1) Clinical efficiency through technical quality and practice; (2) Efficiency in using and attracting resources, with an important component related to the financial management of the hospital; (3) Orientation towards continuity together with positive response to the needs and demands of the community; (4) Safety provided through high quality, ensured throughout the entire flow of relations with the suppliers, patients and with the whole community and (5) Orientation focused on patients in order to get them fully satisfied (Loan., Barliba, Nestian., Stefan & Tiță., 2012)

According to Loan, Nestian and Tiță, (2012), healthcare management outcomes of a public health service can be achieved through a dynamic tension among accomplishment of its mission (fulfilment of objectives), acquisition and control of resources (financial sources, prestige), keeping and development and human resources (welfare of employees and personal development) and integration and previsibility of services provided compared with the capacity to satisfy the needs and expectations of service users (patients).

Impact of Industrial Unrest in Health Sector Performance Outcomes

The effects of labor unrest in the health care industry may be particularly pronounced, given its labor-intensive production process, and the potentially serious consequences of substandard health care production. Health care production is particularly labor intensive, with labor's share of production accounting for nearly 60 percent of hospital costs. Nurses in particular constitute the largest group of workers in a hospital, and often have a considerable impact on a hospital patients' experience. Hospital administrators acknowledge that nurses are the safety net. They are the folks that are right there, real time, catching medication errors, catching patient falls, recognizing when a patient needs something and avoiding failure to rescue, (Chima, 2013; Abbasi, 2014; Davies, 2015; Park & Murray, 2014).

Despite the increased role of organized labor unrest in the health care industry, few studies have examined the role of labor unrest on health care production, and the results of these studies offer no clear conclusions as to the effect of these strikes on patients. Early work on healthcare strikes by James (2009), and Pantell and Irwin (2009), examines the effects of physician strikes on patient care. James (2009), investigates the impact of a physician work slowdown tied to increased malpractice rates in Los Angeles. He finds that causes of death shifted over the course of the slowdown, with decreases in deaths from elective surgery and increases in deaths associated with emergency room transfers.

Access to quality health services is crucial for the improvement of health outcomes, such as those targeted by the Millennium Development Goals (MDGs) adopted by the international community in 2000 (Koblinsky, 2009). A health workforce crisis (such as strike action and brain drain) has the potential of crippling healthcare delivery in many low-income countries.

Impact of Industrial unrest on Production Efficiency

Published information points to disruption in delivery of health services albeit to variable proportions even within the same country (Njuguna, 2015; Ruiz et al., 2013). The effects of the national health workers' strike in 2014 were evaluated in the Mombasa county referral hospital. It was found that "outpatient attendance declined by 64.4%, special clinics attendance by 74.2%, and deliveries by 53.5%. Inpatient admissions declined by 57.8 % and inpatient deaths by 26.3% (Njuguna, 2015). In 2017, a prolonged doctors' strike that was unprecedented in many ways, but most prominently that the officials of the doctors' union were jailed prior to the conclusion of the strike (African Media Agency, 2017). During this strike, anecdotally maternal deaths doubled (Murumba, 2017). During a nurses' strike that started in the same time window, reports indicated 12 deaths directly attributable to the nurses' strike (Lancet, 2017).

Mainstream media is more likely to report anecdotal information on outcomes of labour unrest, as they are likely to be used by opposing sides to advance specific narratives, blurring the real impact of labour unrest (Nation Media Limited, 2015; Okeyo, 2017). However, the impact of labour unrest appears more severe in developing countries challenged by poorer socio-economic circumstances, embedded infrastructural deficiencies, and lack of viable alternative means of obtaining healthcare (Chima, 2013). Published data also indicates that periods of unrest are not necessarily associated with significant change in untoward outcomes such as deaths (Persaud&Bruggen, 2015). Contrary to expectation, untoward effects are seen to increase when services are restored. However, the nature of labour unrest varies from one country to another, with some health workers withdrawing only services for regular programs but not critical services dealing with emergencies and serious injuries. This may partly be responsible for the observation that labour unrest are not associated with increased death rates.

A study by Oleribe, Ezieme, Oladip, Akinola, Udofia and Taylor-Robinson, (2016), in Nigeria identified disruption of patient care (96.7 %) as the most common implication of health worker strikes in Nigeria. Perceived consequences and reasons for further discontent were high referral rates to private hospitals (66.0 %), patient loss to follow-up (56.0 %), mismanagement by alternative healers and high private hospital costs (17.3 %). Other common effects of strikes by healthcare workers on patients and healthcare systems cited by the respondents were an increase in financial burden on patients; increased morbidity and mortality, especially amongst the poor; collapse of public funded health facilities; loss of confidence in the health system; unequal access to quality medical care; emigration of qualified health workers; increased spread of contagious diseases; and negative impact on national productivity.

Respondents identified disruption of healthcare, increase in death rate of patients, complications in patient health, increase in financial burden for the patients, collapse of healthcare facilities, patients' loss of confidence in the health system, healthcare worker brain drain, spread of contagious diseases, and negative effects on national productivity as some of the negative consequences of strikes. These are similar to what Wolfe documented in an editorial in American Journal of Public Health in 1979 in which he also identified revenue losses to the hospital, increased death on transit as patients are transferred from one centre to the next, as consequences of healthcare workers strikes in the USA in the 1970s (Oleribe, et al., 2016).

Adebimpe and colleagues in Lagos had similar findings. In Lagos, they discovered that participants believed that healthcare worker strikes led to disruption of healthcare services, discharge of patients from hospital without completeness of care, limited care to clients, and led to high rate of referrals to private hospitals (Twala, 2012). In the same vein, Ogunbanjo and Knapp van Bogaert(2009), identified

two classes of consequences – on the patient and on the health workers. For patients, work-loss (if employed), wasted money for transport, treatment delays, prolongation of suffering, irreversible damage to health, dangerous drug interruptions and death were the documented consequences of strikes; while financial gain, improved working conditions which may contribute to less emotional pressure and even a degree of dissuasion from emigrating may be gains of strikes to healthcare workers, (Ogunbanjo&Bogaert, 2009). This shows that the consequences of healthcare worker strikes are greatly skewed in favour of healthcare workers.

The study by Ogunbanjo and Bogaert (2009), also cited disruption of patient care (96.7%) as the commonest implication of healthcare worker strikes in Nigeria. Other production efficiency related consequences were high referral rates to private hospitals (66.0%), patient loss to follow-up (56.0%), mismanagement by alternative healers and high private hospital costs (17.3%). Other common effects of strikes by healthcare workers on patients and healthcare systems cited by the respondents were an increase in patient death rates, more patient morbidity especially amongst the poor with an increase in financial burden, collapse of public-funded health facilities, patients' loss of confidence in the health system, unequal access to quality medical care, a brain drain of qualified healthcare workers, increased spread of contagious diseases, and negative impact on national productivity. Ogunbanjo and Bogaert (2009), identified two classes of consequences – on the patient and on the health workers. For patients, the production efficiency related consequences include treatment delays, prolongation of suffering, and irreversible damage to health, dangerous drug interruptions and death.

A study by Gyamfi (2010), reveals that majority of the patients studied indicated that strike action of nurses brought about a deterioration of patient's health conditions which could be due to long stay at the hospital and contraction of communicable diseases from affected patients.

Impact of Industrial Unrest on Organizational Resource Management

The study by Ogunbanjo and Bogaert (2009), reported that the consequences of healthcare worker strikes are greatly skewed in favour of healthcare workers. In the study, the respondents cited common effects of strikes by healthcare workers on the management of organizational resources to more patient morbidity especially amongst the poor with an increase in financial burden, collapse of public-funded health facilities, patients' loss of confidence in the health system, unequal access to quality medical care, a brain drain of qualified healthcare workers, increased spread of contagious diseases, and negative impact on national productivity. In the identified two classes by Ogunbanjo and Bogaert (2009), for patients, the consequences on the resources management included work-loss for the employed patients, and wasted money for transport while for the workers; the consequences included

financial gain, improved working conditions which may contribute to less emotional pressure and even a degree of dissuasion from emigrating. This indicates that the consequences are greatly skewed in favour of healthcare workers.

Gyamfi (2010), in his paper assessed the effects of industrial unrest from the perspectives of a cross-section of fifty nurses and patients at the Korle-Bu Teaching Hospital (KBTH), Accra, Ghana in West Africa, spanning through the period 2004 to 2008. The study adopted a deductive study based on descriptive analyses of statistical data gathered from the data subjects, who were randomly selected. The study observed that strikes by the nurses in Ghana sent signals to the international community about workers' unrest in Ghana and increased the national and household expenditure. It also revealed that when the nurses went on strike, the health of the patients deteriorated which brought about reduction in the revenue generation of the economy of Ghana. The study showed that 88% of the nurses believed strongly that their strike actions affected revenue mobilization of Ghana. All the nurses accepted that their strike actions had serious adverse effects on their patients. Most of them also agreed that their strike tarnished the image of the country internationally, led to brain drain, brought about increase in the family expenditure of their patients, reduced their productive time and led to contraction of communicable diseases from the hospital.

According to Gyamfi (2010), most of the nurses studied opined that their actions increased the 'Brain Drain' of nurses. Majority of the patients indicated that strike action of nurses caused a rise in the nation's budget and brought about a deterioration of patient's health conditions which could be due to long stay at the hospital and contraction of communicable diseases from affected patients.

Impact of industrial unrest on Social Accountability

In Canada, a 4-week province wide nurses' strike caused the closure of 57% of the acute care beds, including 47% of the intensive care beds in that province. The effect of the strike on a facility that did not close was that the number of emergency admissions, severity of illness and rate of death in the intensive care unit increased (Stabler et al., 2004). In New Zealand a junior doctors' strike was reviewed and the effect on the emergency department and internal medicine department documented. During the strike, elective admissions and outpatient clinics were mostly cancelled. In the emergency department, the waiting times and length of stay were markedly reduced. In internal medicine, the proportion of patients admitted to the short stay unit rather than the general medical wards increased (Robinson, McCann, Freeman, & Beasley, 2008). In England, a 24-hour strike in 2012 saw, in comparison with regular service delivery, emergency admissions fall by 2.4% and a decrease in elective admissions by 12.8%. "There was a 7.8% drop in the number of outpatients seen by medical staff on the day of the strike and a 45.5% increase in the number of cancelled appointments by

NHS hospitals, while A&E attendances dropped by 4.7%." Across the different regions in England, the impact of the strike was varied (Ruiz, Bottle, & Aylin, 2013).

A study by Oleribe et al., (2016), in Nigeria identified disruption of patient care (96.7 %) as the most common implication of health worker strikes in Nigeria. Perceived consequences and reasons for further discontent were high referral rates to private hospitals (66.0 %), patient loss to follow-up (56.0 %), mismanagement by alternative healers and high private hospital costs (17.3 %). Other common effects of strikes by healthcare workers on patients and healthcare systems cited by the respondents were an increase in financial burden on patients; increased morbidity and mortality, especially amongst the poor; collapse of public funded health facilities; loss of confidence in the health system; unequal access to quality medical care; emigration of qualified health workers; increased spread of contagious diseases; and negative impact on national productivity. Additionally, after a series of health worker strikes, it was found that less than half of the health workers who participated in the study supported industrial action. Poor health care leadership and management were cited as the most common reason for the strike. Consequences of the strike to the general population however were not interrogated (Oleribe et al., 2016). Friedman and Keats, (2014), while looking at babies born during health worker strikes in Sub-Saharan Africa found that "babies born during strikes were less likely to have survived until the time of the survey, less likely to have been born in health facilities, more likely to have been born at home, and more likely to have died within the first month".

Like other public sectors, the health sector in Kenya has experienced prolonged labour disputes albeit repressed by public authorities prior to the promulgation of the Constitution of Kenya 2010, (Kenya National Assembly, 2005). Until 2017, the labour dispute of Junior doctors in 1994 held the record of being the longest labour dispute in the sector, lasting a record 105 (Menya, 2011). In 2017, a strike by junior doctors lasted for 100 days (Aljazeera News Network, 2017) followed by a strike by nurses which lasted a record 5 months (Nyamai, 2017).

Health experts meeting in Geneva, Switzerland in December (2001), concluded that due to low pay and other poor conditions of service most nurses embark on strike or leave the health care profession worldwide. It is therefore necessary for every country to see to manage to improve the health services delivery by managing the human resources for health very well in order to maintain them according to the standard of World Health Organization (WHO, 2003).

Healthcare systems are significantly under-resourced in most countries and as a result are unable to respond as effectively as often needed to unforeseen crises, such as infectious disease epidemics, with consequent compromise to the quality of healthcare globally (Atwoli, 2003). This is worse in sub-

Saharan Africa, where there are severe shortages of well-trained staff, owing to poor remuneration, internal and external migration of health workers, and inadequately implemented employment schemes locally (Twala, 2012). Despite these overt deficiencies in provision in some parts of sub-Saharan Africa, there are also occult deficiencies in manpower, resulting from industrial action by healthcare workers (strikes), with consequent closure of public healthcare institutions. In addition, healthcare worker discontentment results in infrequent attendance to patients, while poor infrastructure often hinders the delivery of quality, timely and relevant services to patients. This is often compounded by public healthcare workers moonlighting by also managing private clinics, having jobs in non-health related industry or working in private hospitals for additional income (Newman, 2013).

IV. SUMMARY OF FINDINGS

This study adopted a descriptive – correlational and causal research design as they can enable assembling and description of the respondents' varied opinions on a number of issues and also facilitate establishing the correlation among the dependent variable being the selected performance indicators and the independent variable being industrial unrest of the medical staff. The study targeted those concerned with the administration of the health sector and the health facilities within Kiambu County and used a self-constructed questionnaire divided into five distinct sections with section one providing some demographic characteristics of the respondents and the health facilities under study. Section two aimed at establishing the occurrence of industrial unrest in the County health system while section three, four, and five aimed at assessing the impact of industrial unrest on the organizational production efficiency, resource management, and social accountability respectively. Various statistical tools were used in the analysis of the data and they include the use of mean and standard deviations, analysis of variance (ANOVA), the Multiple comparisons (LSD) and Levene's test

The study has established that during the period between 2010 and 2017 county health sector frequently experienced industrial unrest with a mean of 2.49. However, the study reveals that the national health sector experienced industrial unrest more frequently between 2010 and 2017 with a mean of 2.62 and that prior to the promulgation of the new constitution and prior to devolving the management of the health sector, the sector less frequently experienced industrial unrest with a mean of 2.09 while after the promulgation of the new constitution and prior to devolving the management of the health sector, the sector experienced industrial unrest more frequently with a mean of 2.52 and after the promulgation of the new constitution and after devolving the management of the health sector, the sector also experienced industrial unrest more frequently with a mean of 2.75. With the period after the promulgation of the constitution 2010 and devolving the management of health sector having a higher mean compared to the period before devolving the management of the health

sector, this particular finding implies that the respondents generally tend to be in agreement that the earlier period experienced more industrial unrest than the latter period and thus the study has been justified as there is a need to assess the impact of the frequent industrial unrests on the health facilities under the management of the County governments

The study has established that generally, with a mean of 2.48, industrial unrest though within the low impact level, it tends towards having a high impact on the production efficiency of the public health facilities. This finding is in agreement with the assertions by a number of authors (such as Chima, 2013; Abbasi, 2014; Davies, 2015; Park & Murray, 2014) that the effects of labor unrest in the health care industry may be particularly pronounced, given its labor-intensive production process, and the potentially serious consequences of substandard health care production. The study further considered the impact of industrial unrest on specific items that can be used in the measurement and assessment of the production efficiency and established that industrial unrest experienced in the health sector has had low impact on the following parameters: Rate of re-hospitalizations with a mean of 2.49; Patient safety with a mean of 2.48 as well as on the personnel safety with a mean of 2.43 and the medical environment safety with a mean of 2.34. Additionally, a low impact of industrial unrest has also been established on the rate of beds occupancy with a mean of 2.27 and on the percentage of patients being informed on their conditions and how to manage the conditions with a mean of 2.31 as well as on using available technology to provide patient care and treatment with a mean of 2.40. The low impact has also been indicated on the utilization of available technology in the operations of the facility with a mean of 2.33; number of non-medical employees attending specialization courses with a mean of 2.02 and on the Number of medical staff attending specialization courses with a mean of 2.01.

The study further reveals that industrial unrest has had a high impact on the following parameters of production efficiency within the public health sector: rate of mortality with a mean of 2.58; rate of complications with a mean of 2.78; average length of hospital stays with a mean of 2.53 and rate at which accidents occurs with a mean of 2.52. Additionally, high impact of industrial unrest was also established on the average cost of operations with a mean of 2.78 and on the rate of nosocomial infections with a mean of 2.58 as well as on the patient waiting time on the queue with a mean of 2.80. Finally, a high impact of industrial unrest was established on the aspect of respect for patients with a mean of 2.59 and on the confidentiality in handling the patients with a mean of 2.70 as well as on the confidentiality in the management of documentations with a mean of 2.67. These findings seem to indicate that the impact of industrial unrest by the medical staff have low impact on those indicators that have to do with the operations and functions of the non – medical staff while for those operations and functions that are purely handled or undertaken under the supervision of the medical staff the

impact is either high or very high. Consequently, it can be considered that whenever there is an industrial unrest by the medical staff, the operational efficiency of those functions undertaken by the medical staff is negatively impacted, thus lowering their efficiency.

These findings are consistent with the observations that industrial unrests lead to disruption in delivery of health services albeit to variable proportions even within the same country (Njuguna, 2015; Ruiz et al., 2013). It is also consistent with the findings by Njuguna, (2015) on the effects of the national health workers' strike in 2014 in Mombasa county referral hospital in which it was found that "outpatient attendance declined by 64.4%, special clinics attendance by 74.2%, and deliveries by 53.5%. Inpatient admissions declined by 57.8 % and inpatient deaths by 26.3% (Njuguna, 2015). The findings are further in agreement with the observations by Murumba (2017) that during periods of a doctors' strike, anecdotally maternal deaths doubled and that during a nurses' strike that started in the same time window, reports indicated 12 deaths directly attributable to the nurses' strike (Lancet, 2017). Further, the findings are consistent with the observations in the same study by Lancet, (2017) that respondents identified disruption of healthcare, increase in death rate of patients, complications in patient health, increase in financial burden for the patients, collapse of healthcare facilities, patients' loss of confidence in the health system, healthcare worker brain drain, spread of contagious diseases, and negative effects on national productivity as some of the negative consequences of strikes.

The study reveals that in general, industrial unrest has a low impact on organizational resources management with a mean of 2.34. The parameters considered with regard to resource management are basically parameters that are due to the general operations of the organization and thus does not entirely depend upon the availability of the medical staff as much as their availability is likely to have an impact. With regard to the specific parameters used in the assessment of organizational resources management, the study reveals that industrial unrest has a low impact on all the parameters namely revenue generation from the facility with a mean of 2.23; utilization of financial resources allocated to the facility with a mean of 2.32; maintenance of equipment with a mean of 2.35 as well as the management of supply chain with a mean of 2.37 and finally on the utilization of equipment's with a mean of 2.41. The impact on these parameters seems to be low since the management of these resources do not entirely depend on the availability of the medical staff. Some of the resources identified with these management activities are handled by the non – medical staff hence the low impacts alluded to. Additionally, some of the resources and management activities such as maintenance of equipment and management of supply chains are always handled by other professionals who are not from the medical field. Consequently, the study can allude that industrial unrest by

the medical staff would not necessarily impact negatively on all the resource management activities of the health facilities.

These findings seems to be consistent with the observations by Persaud and Bruggen, (2015) that published data indicates that periods of unrest are not necessarily associated with significant change in untoward outcomes such as deaths but contrary to expectation, untoward effects are seen to increase when services are restored and that the nature of labour unrest varies from one country to another, with some health workers withdrawing only services for regular programs but not critical services dealing with emergencies and serious injuries and thus this may partly be responsible for the observation that labour unrest are not associated with increased death rates. Additionally, the findings are in agreement with what Wolfe documented in an editorial in American Journal of Public Health in 1979 in which he also identified revenue losses to the hospital, increased death on transit as patients are transferred from one centre to the next, as consequences of healthcare workers strikes in the USA in the 1970s (Oleribe, et al., 2016). Adebimpe and colleagues in Lagos had similar findings.

The study also reveals that generally, industrial unrest in the public health sector has had a low impact on Human Resource Management with a mean of 2.28. With regard to the specific parameters used to assess the impact of industrial unrest on human resource management, the study reveals that industrial unrest has had low impact on employees' remuneration and compensation management with a mean of 2.11. Additionally, a low impact has been established on the management of employees' development and continuous education programs with a mean of 2.11; the recruitment of highly qualified employees with a mean of 2.24 and on the management of personnel issues with a mean of 2.29. A low impact of the industrial unrest has been indicated on acknowledging and attending to individual employee needs with a mean of 2.32, the management of the working environment with a mean of 2.33 and on setting a conducive management of the medical practice environment with a mean of 2.37 and finally on the management of employees' absenteeism with a mean of 2.44.

The impact on these parameters seems to be low since the management of the human resources do not address only the concerns of the medical staff but rather addresses the concerns of all the workers within the health facilities. Additionally, the management of human resources is not actually handled by the medical staff but by the Human resources management practitioners which explains why the impact is low. Whereas the impact could be different if the study considered the medical staff alone, the fact that other non – medical staff were also considered could imply that during the periods of such unrests, human resource management services and practices are on- going particularly with regard to serving the employees who are not involved in the unrests. Consequently, the study can observe that industrial unrest by the medical staff would not necessarily impact negatively on all the human

resource management practices and outcomes of the health facilities.

The study further indicates that industrial unrest has a low impact on social accountability and reactivity with a mean of 2.23. With regard to the specific parameters adopted in assessing the impact of industrial unrest has a low impact on social accountability and reactivity, the study reveals that the impact is low on the rate of average payment with a mean of 1.92, the personnel satisfaction with a mean of 1.97 and on health promotion activities with a mean of 1.99. Additionally, the impact is low on the integration within health system with a mean of 2.01 as well as on the integration within community with a mean of 2.05. Further, the study reveals that the impact is also low on the orientation towards public health with a mean of 2.13, the personnel perception on the health facility with a mean of 2.22 and on the rate of absenteeism with a mean of 2.23 as well as on the percentage of counselled patients with a mean of 2.28. Industrial unrest also has a low impact on community access to various hospital facilities with a mean of 2.35, the percentage of patients with GP/specialist referral with a mean of 2.36 and on the rate of resignations/transfers with a mean of 2.47 as well as on the percentage of patients referred to other health facilities with a mean of 2.60. However, the impact is high on the percentage of patients recommended for discharge with a mean of 2.64.

The findings are consistent with the findings by Oleribe et al., (2016) in Nigeria that strikes leads to disruption of patient care (96.7 %): as the most common implication of health worker strikes in Nigeria. Perceived consequences and reasons for further discontent were high referral rates to private hospitals (66.0 %), patient loss to follow-up (56.0 %), mismanagement by alternative healers and high private hospital costs (17.3 %). The study also established that other common effects of strikes by healthcare workers on patients and healthcare systems cited by the respondents were an increase in financial burden on patients; increased morbidity and mortality, especially amongst the poor; collapse of publicly funded health facilities; loss of confidence in the health system; unequal access to quality medical care; emigration of qualified health workers; increased spread of contagious diseases; and negative impact on national productivity.

The findings are also consistent with the observations by Stabler et al., (2004) that In Canada, a 4 week province wide nurses' strike caused the closure of 57% of the acute care beds, including 47% of the intensive care beds in that province and that the effect of the strike on a facility that did not close was that the number of emergency admissions, severity of illness and rate of death in the intensive care unit increased. Similarly, the findings are consistent with the observations in New Zealand when a junior doctors' strike was reviewed and the effect on the emergency department and internal medicine department documented. During the strike, elective admissions and outpatient clinics were mostly cancelled. In the emergency department, the waiting times and length of

stay were markedly reduced. In internal medicine, the proportion of patients admitted to the short stay unit rather than the general medical wards increased (Robinson, McCann, Freeman, & Beasley, 2008). The findings are also consistent with the findings in a study conducted in England in which a 24 hour strike in 2012 saw emergency admissions fall by 2.4% and a decrease in elective admissions by 12.8% and a 7.8% drop in the number of outpatients seen by medical staff on the day of the strike and a 45.5% increase in the number of cancelled appointments by NHS hospitals, while A&E attendances dropped by 4.7% (Ruiz, Bottle, & Aylin, 2013). Additionally, they are consistent with the findings of a study in Lagos in which it was discovered that participants believed that healthcare worker strikes led to disruption of healthcare services, discharge of patients from hospital without completeness of care, limited care to clients, and led to high rate of referrals to private hospitals (Twala, 2012).

V. CONCLUSIONS

Based on the findings of this particular study, it is concluded that during the period between 2010 and 2017 both the county and national health sector experienced industrial unrest with the frequency being higher at the national level. However, frequency of the industrial unrest was higher and more after devolving the management of the health sector. The study further concludes that generally, industrial unrest has a high impact on the production efficiency of the public health facilities with the impact being low on some parameters and high on a section of the parameters

Further, the study concludes that in general, industrial unrest has a low impact on organizational resources management and the impact is also low on all the parameters adopted in the assessment of organizational resources management. Additionally, the study also concludes that generally, industrial unrest in the public health sector has had a low impact on Human Resource Management with the impact being low on all the parameters adopted to assess human resource management. The study has also established that industrial unrest has a low impact on Social accountability and reactivity of the public health facilities and the impact is also low on all parameters used to assess this except on the percentage of patients recommended for discharge which is high.

VI. RECOMMENDATIONS

The study recommends that since both the national and county governments have experienced industrial unrest in the public health sectors with the frequency of the unrest being more in the devolved unit, county governments should institute systems measures and policies that would help in addressing the unrests in the sector. The further recommends that since industrial unrest has a high impact on the production efficiency of the public health facilities, mitigating measures should be developed to ensure consistency in production efficiency even during periods of industrial unrests particularly on matters dealing: rate of mortality; rate of complications; average length of hospital stay and rate at

which accidents occurs; the average cost of operations; the rate of nosocomial infections; the patient waiting time on the queue and respect for patients and on the confidentiality in handling the patients as well as on the confidentiality in the management of documentations.

Additionally, the study recommends since in general, industrial unrest has a low impact on organizational resources management and as such systems established to monitor resource management should be upheld and that since industrial unrest in the public health sector has had a low impact on human resource management, systems established to monitor human resource management should be upheld.

Finally, the study recommends that since industrial unrest has a low impact on social accountability and reactivity of the public health facilities, the systems established to monitor social accountability and reactivity should be upheld. However, there is a need to improve and enhance the systems in place to handle patients' discharge process to ensure patients are not discharged prematurely as a result of the industrial unrests.

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