

Devolved Human Resources for Health and Service Delivery In County Government Hospitals In Kenya.

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ABSTRACT

This study investigates the impact of devolved human resources for health (HRH) on service delivery in Kenya's county government hospitals. Since the adoption of devolution in the 2010 Kenyan Constitution, healthcare functions have shifted from national to county governments, creating both opportunities and challenges. This study aimed to explore the extent to which devolved human resources for health affected service delivery in Kenya's county government hospitals. It sought to identify healthcare human resources for health challenges, evaluate the role of intergovernmental leadership, and propose strategies to enhance efficiency and service quality. The study employed a positivist research philosophy and mixed-methods (qualitative and quantitative) research design, analyzing data from 385 respondents across 137 county hospitals using SPSS version 27. The findings show that devolved human resources for health positively and significantly influenced service delivery. The moderating variable, intergovernmental leadership further strengthened this influence. The study concludes that devolved human resources for health influences service delivery. The study recommends that for service delivery to improve there is need for reform, as far as devolved human resources for health is concerned, as well as the need to enhance intergovernmental leadership. The study recommends the need for adequate staffing for both medical and non- medical staff, adhering to the organization's staff establishment and that the employees be compensated commensurate with the services they render.

Keywords: Devolved Human Resources for Health, Service Delivery, County Government, Public Hospitals, Public Healthcare, Healthcare Management, Healthcare in Kenya

1.0 INTRODUCTION

1.1 Background of the Study

The study sought to find out the influence of devolved human resources for health on service delivery in county government public hospitals in Kenya. The healthcare function in Kenya was devolved from the national government to the county governments after the promulgation of the Constitution of Kenya in 2010. While the national government retained the healthcare functions of development of health policies, capacity building, regulation, technical assistance to counties and management of national referral health facilities, the county governments became the implementers of national government policies and mainly promote primary healthcare (Ghai & Ghai, 2021).

Devolution, a form of administrative decentralization that grants local governments' decision-making authority, distinguishing it from delegation and deconcentration (Li & Peng, 2023). It is, however, critical to note that during devolution, while the central government transfers functions and authority to local governments, the devolved powers of the sub-national authority are ultimately still vested in the central government, therefore the state remains legally recognized as a unitary state. This therefore means that the legislation that created the devolved governments can be repealed or amended by the central government just in the same way as any other statute (Hofmeister & Tayao, 2016). This is unlike in the case of federalism, for example in the USA, where the powers given to the federal state as well as the state

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governments are embedded in the Constitution, giving the constituent units in a federal system an unalterable state (Sosa, 2017).

The best gauge of any government's good governance performance is public service delivery (Wagana, 2017). However, there are global events that can devastate even the most excellent public service delivery systems. For example, the Corona Virus Disease 2019 (COVID-19) pandemic that disrupted the entire world's ability to deliver services to its citizens. Access to public services is a key determinant of a country's human development and productivity (Msafiri, 2018). The indices that can be used to measure service delivery include: improved and affordable health services, low rates of inflation, provision of clean water and sanitation services, improved education, high quality infrastructure and motorable roads to rural areas for purposes of transporting raw material and agricultural produce. These services are a determinant of a population's quality of life (which can be measured by the Human Development Index, HDI) and access to them is key to poverty reduction and enhanced development (Wagana, 2017).

In Africa, service delivery has faced crisis due to several challenges that include avoidable wars, military rule, kleptocracy, neo-colonialists and other disasters (Olatunji, 2017). The Mo Ibrahim Foundation convened young African professionals and emerging leaders to gather their perspectives on public service in Africa. The participants expressed their fundamental standard of public service expectation as: quality, inclusive and equitable access to health, education, decentralized services, security, jobs, and justice. These services, they said, need to be delivered in a professional, customer-focused, accountable, transparent manner while embracing technology and the national governments must take the lead in this process, as the main actors (Mo Ibrahim Foundation, 2018).

The World Health Organization defined the six key elements of a well-functioning health system as: healthcare financing, leadership and governance; Human Resources for Health, health information systems; essential medical products, technologies and vaccines; and finally, service delivery. A well-functioning healthcare system is one that responds to its members' needs through: improved health status, protection against financial consequences of ill-health, defense against health threats, equitable access of healthcare services and member participation in decision-making concerning both their health as well as the healthcare system (Manyazewa, 2017)

The significance of healthcare worldwide can be attested to by the conception of the eight United Nations Millennium Development Goals (MDGs) in September 2000 and signed by all member countries with a focus of achievement by end of 2015. For purposes of continuity after 2015, the MDGs later gave way to the origin of the seventeen United Nations Sustainable Development Goals (SDGs), beginning 2016. Both the MDGs and the SDGs have included aspects of healthcare as part of their goals (Kumar, Kumar & Vivekadhis, 2016).

Understanding the impact of devolved human resources for health is crucial for improving service delivery and addressing systemic inefficiencies in Kenya's public health sector. This study provides empirical evidence to inform policymakers, healthcare administrators, and stakeholders on best practices for enhancing governance and service delivery in county hospitals

1.2 Statement of the Problem

Healthcare in Kenya is considered fundamental for economic development. This can be attested to by its inclusion in the Kenya Vision 2030 as a key pillar of development (Kenya Vision 2030, 2020). Aligned to this, the Ministry of Health has also developed the Kenya Health Policy 2014-2030 and further, it has developed healthcare strategies through its periodic four-year Kenya Health Sector Strategic and Investment Plan (KHSSIP). Currently under implementation, is the 2023-2027 strategic plan (Ministry of Health Kenya, 2022).

The healthcare function was devolved from the national government to the counties with the promulgation of the new constitution in 2010. The primary reasoning behind the devolution of healthcare was for purposes of allowing the local governments to draft health interventions and models that best suited their distinct county needs, allowing them to make speedy and independent decisions and finally, to allow the citizens to participate in decision-making at the grassroots level (Kimathi, 2017).

According to the World Health Organization, service delivery is one of the critical components of a well-functioning healthcare system. In Kenya, however, service delivery in the healthcare sector has faced several challenges. There have been cases of serious medical malpractice, for example, where a patient

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mistakenly underwent surgery while the ailing patient with a brain blood clot was discharged with medication; theft of newborn babies from the hospitals as their mothers recuperated after delivery; sexual assault of new mothers (Omboki, 2018) and the death of patients due to retained surgical items inside patients' bodies who have undergone surgery (Okech, 2018).

Cases of medical workers threatening or going on strike due to poor pay and working conditions have also been on the rise. In 2017, doctors downed their tools for 100 days, as they clamored for higher salaries, increased doctor numbers in public hospitals and improvement of dilapidated public health facilities; this strike led to unprecedented loss of lives. The COVID-19 pandemic also exposed the country's gaps in critical health services, where several counties have been found to have no intensive care unit (ICU) or medical ventilators, which are necessary for the survival of COVID-19 patients and other patients as well (Adudans, 2020).

Corruption in the healthcare sector in Kenya has also been rampant. In 2018, The Ministry of Health was impacted by the loss of 10.9 billion Kenya shillings through: unverifiable expenditure, criminal cartels, and undelivered supplies (Gachuri, 2019). Part of Chinese billionaire Jack Ma's COVID-19 donation of protective gear and testing kits was also stolen while in transit (Wasuna & Oketch, 2020) and there was also theft of millions of dollars of financial aid for COVID-19 that had been received therefore leading to financial and medical material shortages in hospitals across the country (Wasike, 2020).

The healthcare sector is an extremely sensitive sector since high disease burden and unnecessary deaths have both microeconomic and macroeconomic impact. At the microeconomic level, there is reduction of organizational productivity and profits and by extension, the loss of household income due to reduced working hours or job loss, therefore increased poverty levels and loss of family breadwinners. At the macroeconomic level on the other hand, there is the loss of taxpayers due to death or job loss; aggregate disease impact on the country's Gross Domestic Product (GDP) and reduced future growth prospects (Neofytidou & Fountas, 2020).

In 2014, the WHO placed Kenya's rate of burden of disease at 24% while Frings *et al.* (2018) noted high rates of years of life lost (YLL) due to premature death in several counties in the country. It is also critical to note that the top five diseases that cause death in Kenya are all preventable and have been the same from 2007 to 2017; and include: HIV/ AIDS, lower respiratory infection, diarrhoea, neonatal disorders and Tuberculosis (IHME, 2017). It is against this background that this study sought to establish the influence of devolved human resources for health on service delivery in county government hospitals in Kenya.

1.3 Specific Objective of the Study

The Specific objective of the study was

- i. To examine the influence of devolved human resources for health on service delivery in county government hospitals in Kenya
- ii. To establish the moderating influence of intergovernmental leadership on the relationship between devolved human resources for health and service delivery in county government hospitals in Kenya

1.4 Research Hypothesis

H₀₁: Devolved human resources for health does not significantly influence service delivery in county government hospitals in Kenya.

H₀₂: There is no significant moderating influence of intergovernmental leadership on the relationship between devolved human resources for health and service delivery in county government hospitals in Kenya.

2.0 LITERATURE REVIEW.

2.1 Theoretical Framework- Herzberg's Motivation Theory

The Hertzberg's Motivation Theory, also known as the Hertzberg's Motivation-Hygiene Theory or the Two Factor Theory or the Dual Structure Theory, was developed by Fredrick Hertzberg in 1959. The theory claims that there are two factors which an organization can change to influence employees' motivation in an organization: motivators and hygiene factors. Motivators are internal factors in the organization that encourage employees to work harder; while hygiene factors are external factors that do not encourage employees to work harder but their absence will demotivate the employees (Gitman *et al.*, 2018). Motivation factors include advancement, growth, achievement, responsibility, the work one does and recognition.

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Hygiene factors on the other hand include working conditions, salary and benefits, interpersonal relationships, supervision and job security.

The critiques of this theory argue that Herzberg: did not consider other job factors that may cause the employee to be satisfied or dissatisfied; he also did not take into consideration the employee's individual differences, meaning that different employees may have different needs therefore different motivators (Mitsakis & Galanakis, 2022). This theory supports the variable devolved HRH given that the workers in the healthcare sector have been clamoring for the improvement of both motivators and hygiene factors, without which they have severally withdrawn their services from the public, with dire consequences.

2.2 Conceptual Framework

Adom, Hussein, and Adu-Agyem, (2018) define conceptual framework as a group of concepts that are broadly defined and systematically organized to provide a focus, a rationale, and a tool for the integration and interpretation of information. The purpose of a conceptual framework is to help the reader to quickly see the proposed relationships between the independent variables, the moderating variable, and the dependent variable. It is a diagrammatic representation of the relationships that exists between the variables under study. The conceptual framework is shown below:

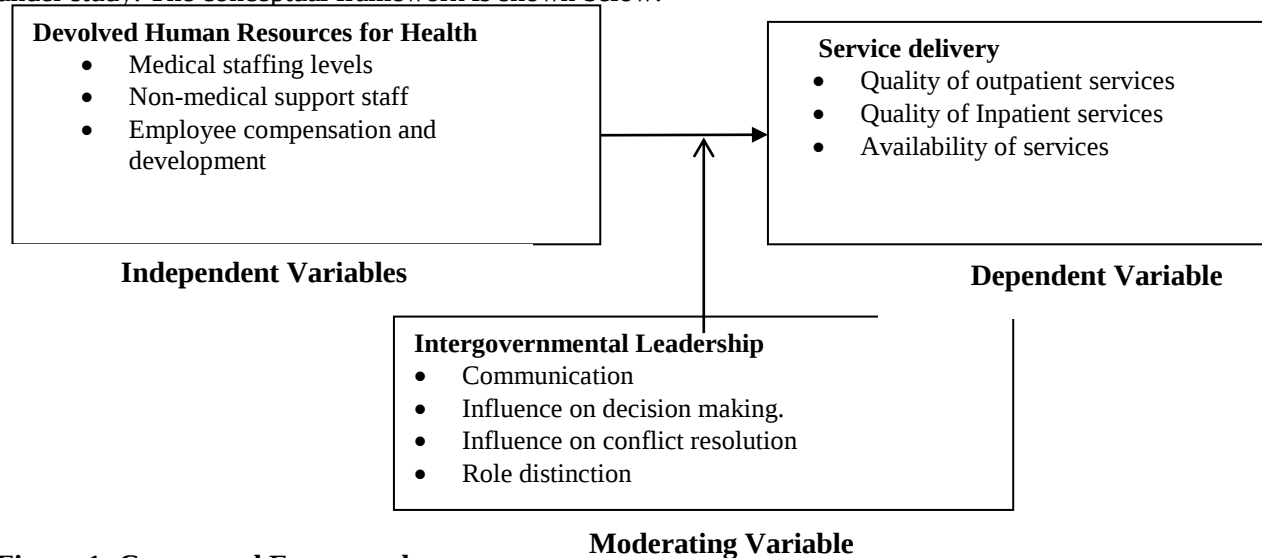


Figure 1: Conceptual Framework

2.3 Review of the study variable

Sumah and Baatiema (2019) defined the Human Resources for Health (HRH) or the Health Human Resources (HHR) as all persons who are engaged in activities with the principal aim of enhancing health. Devolved HRH are the workforce in the subnational governments. These people include: medics who deliver direct medical care (for example: doctors, nurses, dentists, social health workers, community health workers and other healthcare providers), as well as those who offer indirect health services, such as health management (for example health services managers) and non-medical health support staff (for example: mortuary attendants, medical record personnel, health information technicians, administrative staff, security, cleaners).

A well-performing health workforce is one that is efficient, responsive, fair and focuses on the most favourable health outcomes within their available resourcing levels. Different countries, according to the World Health Organization, are developing their health personnel through the processes of education, training, recruitment and distribution so as to enhance their Human Resources for Health. However, there is still a global shortage of almost 4.3 million direct and indirect health workers and especially so in sub-Saharan Africa, therefore resulting in the situation being declared a 'health workforce crisis' (Manyazewa, 2017). This crisis was reportedly brought about as a result of years of underinvestment in health education, training, management, remuneration and incentives as well as their work environment.

The health workforce crisis, according to Ahmat, *et al.* (2022) has been aggravated in low-income countries and further complicated by: intense brain-drain, increasing and progressively complex disease burden, rapid

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population growth, poor health infrastructure, poor human resource strategies and political and civil unrest. This therefore has resulted in fragile health systems, precarious human resource situations and uneven government resource planning. The constructs of devolved Human Resources for Health (HRH) in this study will be medical staffing levels, non-medical support staff and employee development and compensation. This study sought to examine the influence of these constructs of devolved HRH on service delivery in county government hospitals in Kenya

2.4 Empirical Review of the Study

Tsofa, Goodman, Gilson and Molyneux (2017) also conducted a study in Kenya on the effect of devolution on HRH and supplies management. They found out that the HRH management function was devolved too abruptly therefore causing confusion on roles and responsibilities at both the local and national levels; this subsequently led to HRH mass resignations as well as strikes. To deal with these issues, the researchers suggested that clarity of roles of the different health workers and capacity building to facilitate the handling of the HRH functions at county level is crucial.

In their study, in Angola, Macaia, and Lapao (2017) noted that despite the efforts that have been put in place, the province of Cambinda still experiences inadequate numbers of HRH, and even worse, these low numbers of healthcare workers are poorly distributed. The study analyzed the circumstances which were affecting the HRH distribution for purposes of developing policies that would improve the health workforce allocation and especially in the remotest villages in Cambinda.

Miseda, Were, Murianki, Mutuku and Mutwiwa (2017) carried out a study on the effect of the shortage of Human Resources for Health (HRH) on the provision of universal health coverage in Kenya. They found out that Kenya is experiencing a shortage of specialized HRH in 46 out of 47 counties and training would be required to cover the skills gaps. Cross-county sharing and efficient use of the existing medical specialists is critical to ensure that patients can access them with ease and in the medium-term and long-term, technology would need to be considered to bridge this gap. Khan (2016) in his exploratory study on the impact that healthcare human resources management has on the quality of healthcare services delivered concluded that when human resources management is effective, then the impact on healthcare quality is greater. The study also proposes that the HRH undergo periodic training to increase their motivation and in turn improve the quality of healthcare services.

3.0 METHODOLOGY

3.1 Research Philosophy

This study predominantly employed the positivism philosophy which adheres to the view that the social world must be observed and understood from an objective perspective and therefore, the researcher must be independent of the study they are carrying out and only what is observable and measurable can be trusted as factual. The researcher's role in this study was therefore limited to data collection and interpretation and will be dissociated from the subject under study (Dudovskiy, 2018). The positivist research philosophy was selected since this study has used existing theories for purposes of developing hypotheses which will be tested.

3.2 Research Design

This study applied the mixed-methods (both quantitative and qualitative) research design, even as it seeks to gain understanding of the relationship between devolved healthcare financing and service delivery in county government public hospitals in Kenya, by making deductions from the perspectives of the data collected.

3.3 Target Population

The target population of this study included hospital employees at the level of Medical Officers (MO), Nursing Officer in-charge (nurses) and the Health Administrative Officer and nursing mothers due for discharge. These were selected from the 137 public referral hospitals in Kenya. This study adopted an approach where both the service providers and the service recipients were included to find out what they think about service delivery in county government hospitals in Kenya. The population was over 10,000.

3.4 Sample Size and Sampling Technique

The multistage sampling technique was used for this study. It divided its target population into counties, under several regions, which was used as the strata in the study. Stratified random sampling was then used to create different strata of employees involved in operations. By simple random sampling MOs, nurses,

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Health Administrative Officer (HAO) and Nursing Mothers (NM) were selected from each of the 137 hospitals. For the nursing mothers, these were selected through purposive random sampling since this was on a voluntary basis. Data was collected from a sample size of 385 respondents. The sample size was calculated using the following formula given by Mugenda & Mugenda (2003).

$$n = \frac{Z^2 pq}{d^2}$$

Where:

n = the desired sample size (If the target population is greater than 10,000)

z = the standard normal deviate at the required confidence level ($Z = 1.96$ for 95% confidence level)

P= the proportion in the target population estimated to have characteristics being measured (0.5).

q = 1-p (1-0.5=0.5)

d = the level of statistical significance (confidence interval, expressed as decimal (0 .05 = ± 5))

If there is no estimate available of the proportion in the target population assumed to have the characteristics of interest 50% should be used (Mugenda & Mugenda, 2003). The Z statistics is taken as 1.96 and desired accuracy at the 0.5 level. The study was done at 95% confidence level and 5 % level of significance. The population is greater than 10,000. The sample size therefore was:

$$n = \frac{(1.96)^2 (.50)(.50)}{(.050)^2} = 384.16 \text{ Respondents}$$

This figure was adjusted to 385 based on the proportionate calculation given above. To get the study sample, the study was utilized a two-stage cluster sampling technique. Cluster sampling is an equal probability sampling method. This method was considered the most suitable technique for this study because there is no complete sampling frame of all the nursing mothers in the country. It was not practical to compile an exhaustive list of nursing mothers given the unpredictable nature of when they may be admitted, deliver, and feel comfortable to participate in the research.

The total population of the 4 selected clusters was over 10,000. The sample of individuals needed was 384, (adjusted to 385). To achieve this, the study determined the number of MOs, Nursing in charge (NiC), Health Administrative Officers (HAO) and nursing mothers (NM) that were selected from each of the selected clusters. This was done by using proportion or sample weight of the population within the clusters (percentage cluster population from the total (4) clusters). The percentage of each cluster was used to determine the sample size for each cluster thus a total of 384, (adjusted to 385) respondents. Finally, all selected clusters were subjected to simple random sampling technique to get the required sample of 384, adjusted to 385.

Table 1 Sample Size

S/N	Administrative Regions	Cluster Population	Proportion sample weight %	MOs (n/4 Clusters)	NiC (n/4)	HAO (n/4)	NM (n/4)	Sample Size (n)
1	Nairobi	3	2	2	2	2	2	8
2	Coast	17	13	12	12	12	14	50
3	Nyanza	14	10	9	9	9	12	39
4	Western	12	9	8	8	8	10	34
5	Central	21	15	14	14	14	16	58
6	Rift Valley	37	27	26	26	26	26	104
7	Eastern	28	20	19	19	19	20	77
8	North Eastern	5	4	3	3	3	6	15
9	Total	137	100%	93	93	93	106	385

3.5 Data Collection Instruments

The researcher developed a questionnaire and an interview schedule for purposes of data collection. The questionnaire contained both closed and open-ended questions, with a Likert scale. The questionnaire was used to gather data from the hospital staff, while the interview guide was used to collect data from the nursing mothers (hospital clients).

3.6 Pilot Test

A pilot test was conducted on a small group of respondents from the target population to gauge whether the instrument had any design or structural weaknesses. Its purpose was to determine the validity and reliability of the research instruments. The pilot test constituted 10% of the target population (39 respondents). Once it was established that the research instruments were both valid and reliable, the researcher proceeded to collect data from the target population.

3.7 Data Analysis and Presentation

Once the primary data collection process from the target population was completed, the raw data was cleaned, captured into the SPSS version 27, and then coded. The data was then subjected to various tests of assumption to check on the quality of the data. The data was then analyzed using both descriptive statistics as well as statistical modeling. Mean, modes, frequency, and standard deviation tests were used to describe the data. Inferential statistical measures, on the other hand, apply inductive reasoning to allow the researcher to arrive at conclusions on the population under study, based on evidence found in the sample. The statistical modeling aimed to show the type and magnitude of relationships that exist between the variables.

4.0 RESULTS AND ANALYSIS

4.1 Descriptive Statistics

The respondents were asked to give the level to which they agreed or disagreed with statements on each variable; the study used a 5-point Likert scale, where 1 = Strongly Disagree, 2= Disagree, 3= Neutral, 4=Agree and 5= strongly agree. The results provided were analyzed and the findings interpreted using frequencies (f), means (M) and standard deviation (SD) values.

The means show where the responses are concentrated while standard deviation indicates the variation of the response from the mean score. The values of standard deviations were used to determine convergence and divergence of views expressed by respondents on the statements. Low values of standard deviations show that respondents shared common views on the statements and large standard deviations indicate that respondents' views differed.

i. Medical Staffing Levels

The respondents were asked to indicate the number of experts who worked in their health facilities. The aim was to establish the level of medical staffing and hence the level of adequacy of the members of medical staff to handle medical and healthcare needs. The level of non-medical staff members was also indicated so as to establish the level of adequacy. The findings are shown in table 4.10. The study established that the level of adequacy of clinical officers was at 62.68%, that for medical officers was at 62.68%, that of nurse assistants was at 67.94%, that of professional nurses was at 64.07%, and that of midwifery professionals was at 49.17%.

This indicates that healthcare facilities have a fair level of professional staff, even though this falls below the staff establishment. The study also found out that the level of adequacy of specialist healthcare staff was high and in all case over 50%. However, the study also established that the level of establishment was very low and in most cases at between 1- 10 medical experts. There seems to be a big shortage in the health workforce, and this affects service delivery in the sector, notes Amde, *et al.* (2014).

Table 2. Medical Staffing Levels

S/N	Staff Type	Establishment	Yes	No
1	Clinical Officers (CO)	61	210(62.68%)	125
2	Medical Officers (MO)	16	251(74.79%)	84
3	Nurse Assistants	40	228(67.94%)	107
4	Professional Nurses	202	215 (64.07%)	120
5	Midwifery professionals	10	165 (49.17%)	170
Specialist Doctors				
7	Obstetrician/Gynaecologist	2	300 (89.4%)	35
8	Ear, Nose & Throat (ENT)	1	189 (56.32%)	146
9	Pediatrician	2	290 (86.42%)	45
10	Ophthalmologist	1	280(83.44%)	55

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11	Dentist	5	278 (82.84%)	57
12	Neurologists	1	270 (80.46%)	65
13	Oncologist	1	310 (92.38%)	25
14	General surgeon	2	167(49.76%)	168
15	Physiotherapists	12	197(58.70%)	138
16	Psychiatry	1	267 (79.56%)	68
17	Orthopedic surgeon	1	170(50.66%)	165
18	Dermatologist	2	189(56.32%)	146

ii. Non-Medical Staff Availability

The respondents were asked to indicate their level of agreement with statements on availability of non-medical staff. Findings are indicated in the table below. A total of 54.3% at (M=2.54, SD=1.18) disagreed with the statement that the county government has employed adequate non-medical staff numbers at the hospital. There were mixed opinions on the statement- the non-medical staff are qualified and adequately skilled to support the medical staff. A total of 42.9% (at M= 3.16, SD = 1.29) agreed with the statement, while a total of 39.3% (M= 3.16, SD = 1.29) disagreed with the statement. The findings indicate that county governments do not seem to have adequate non-medical staff. Further still some of the non-medical staff seem to possess requisite qualifications and skills while others did not possess the adequate qualifications and skills. These findings disagree with those of Macaia and Lapao (2017) who opine that non-medical staff must be adequate, quantitatively and qualitatively.

The overall mean was 2.85, while the highest mean was 3.16 (related to the question: The non- medical staff are qualified and adequately skilled to support the medical staff). This means that most of the respondents were in agreement with this statement. The lowest means was 2.54, meaning that most of the respondents disagreed with the statement: the county government has employed adequate non- medical staff numbers at the hospital

Table 3 Non- Medical Staff Availability

S/ N	Statement on Non-Medical Staff Availability	1(SD)	2(D)	3(N)	4(A)	5(SA)	M	SD
1	The county government has employed adequate non- medical staff numbers at the hospital	21.4%	32.9%	21.4%	18.6%	5.7%	2.54	1.18
2	The non- medical staff are qualified and adequately skilled to support the medical staff.	18.3%	24.6%	16.8%	23.9%	15.4%	3.16	1.29

Overall mean 2.85

iii. Employee Compensation and Development.

The respondents were asked to indicate their level of agreement with statements on employee compensation and development. The findings as shown in the table below indicate that 54.3% of the respondents disagreed with the statement -members of staff are well remunerated at (M=2.54, SD=1.188). A total of 47.9% of the respondents disagreed with the statement- the county government has invested in employee growth through continuous employee training and skills development at (M=2.61, SD=1.089). Another 56.5% of the respondents disagreed with the statement that the devolution of the HR for health function has improved working conditions at the hospital at (M=2.43, SD=1.242).

Respondents showed mixed opinions on the statement that the employees at all levels are involved in driving the hospital's goals. A total of 35.7% of the respondents disagreed, while 32.8% agreed with the statement at (M=2.87, SD=1.154). Another 42.7% of the respondents agreed with the statement that the county, after devolution, is able to hire all hospital employees from within its geographical borders at (M=3.79, SD=1.115). A total of 47.8% of the respondents disagreed with the statement that growth and advancement in the organization is by merit at (M=2.67, SD= 1.080). A total of 45.6% of the respondents agreed with the statement devolved HR for health influences services delivery (at M=3.72, SD=1.124).

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On the statement -briefly suggest how to improve the devolved human resources for health, the respondents suggested that there was need for recruitment of more healthcare staff to handle the ever-increasing healthcare needs as demonstrated by the ever-increasing population. The staff also need to have adequate qualifications and skills. The respondents noted that the lean human resources for healthcare were overwhelmed most of the time hence delivering services with high lead times. Findings agree with those by Miseda, *et al.* (2017) who notes that the medical sector not only needs sufficient numbers but these must also be well remunerated.

The overall mean was 2.95. The highest mean was 3.72, meaning that most respondents agreed with the statement that: devolved healthcare HR influences services delivery. The lowest mean was 2.43, meaning that most respondents disagreed with the statement: devolution of the healthcare HR function has improved working conditions at the hospital.

Table 4 Employee Compensation and Development

S/ N	Statement on Employee Compensation & Development	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	M	SD
1	Members of staff are well remunerated	21.4%	32.9%	21.4%	18.6%	5.7%	2.54	1.188
2	The county government has invested in employee growth through continuous employee training and skill development	18.3%	29.6%	26.8%	23.9%	1.4%	2.61	1.089
3	Devolution of the healthcare HR function has improved working conditions at the hospital	27.5%	29.0%	24.6%	10.1%	8.7%	2.43	1.242
4	Employees at all levels are involved in driving the hospital's goals	15.7%	20.0%	31.4%	27.1%	5.7%	2.87	1.154
5	The county, after devolution, is able to hire all hospital employees from within its geographical borders	15.7%	21.4%	20.1%	27.0%	15.7%	3.79	1.115
6	Growth and advancement in the organization is by merit	13.0%	34.8%	30.4%	15.9%	5.8%	2.67	1.080
7	Devolved healthcare HR influences services delivery	6.9%	20.8%	26.8%	26.8%	18.8%	3.72	1.124

Overall mean 2.95

1. Intergovernmental Leadership

The second objective of the study was to determine the moderating effect of intergovernmental leadership on the relationship between devolved healthcare financing and service delivery. The respondents were asked to give their opinions on statements on intergovernmental leadership. The findings are presented below. Findings indicate that 49.7% of the respondents disagreed with the statement that there are clear and open channels of communication between the national & county governments at (M=3.215, SD=1.213). A total of 53.7% of the respondents disagreed with the statement that there is top leadership support to hospital initiatives at (M=2.524, SD=1.091). A total of 53.7% disagreed with the statement that the decision-making process is fast and participatory at (M=2.791, SD=1.676).

Findings indicate that a majority, 63.4% of the respondents disagreed with the statement that conflict resolution is fast & proficient at (M=3.119, SD=1.016). There were mixed opinions on the statement-the working relations between the two governments is professional- with 43.5% of the respondents agreeing with the statement and 45.8% of the respondents disagreeing with the statement at (M=3.498, SD=1.832). A total of 49.9% of the respondents agreed with the statement -there are clear roles for the leadership of the national & county governments at (M= 3.698, SD =1.173). A majority at 56.5% of the respondents agreed with the statement that sometimes matters are politicized at (M=3.871, SD=1.238).

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On the statement briefly explain how the intergovernmental leadership can be improved, the respondents suggested that there was need to ensure compliance with the legal framework, there was need to review and develop clear job descriptions and the scope to be clearly demarcated to prevent role overlap. Several respondents at about 52% felt there was need to design a framework for devolution and practically devolve healthcare without any influence, or interference from the national & county governments and other interested stakeholders. Respondents suggested that politicization was entrenched in the system and there was need for leadership review and professionalization of the system. These findings are consistent with those by McCollum *et al.* (2018) who in their comparative study found out that, governance at the sub-national levels was hindered by limited priority-setting capacity, poor community accountability, inadequate clear guidance, and previously existing negative contextual norms.

The overall mean is 3.25, meaning that most respondents agreed with the statements on intergovernmental leadership. The highest mean is 3.871, meaning that most respondents agreed with the statement: sometimes matters are politicized. The lowest mean is 2.524, meaning that most respondents disagreed with the statement: there is top leadership support to hospital initiatives.

Table 5 Intergovernmental Leadership

Statements	1	2	3	4	5	Mean	Std. Dev.
There are clear and open channels of communication between the national & county governments	33.7%	16%	10.9%	22.8%	14.7%	3.215	1.213
There is top leadership support to hospital initiatives	40.4%	13.3%	10.4%	25.6%	10.3%	2.524	1.091
The decision-making process is fast and participatory	35.4%	21.9%	18%	10.9%	12.9%	2.791	1.676
Conflict resolution is fast and proficient	34.7%	28.7%	4.7%	20.8%	13%	3.119	1.016
The working relations between the two governments is professional	23.3%	22.5%	10.3%	30.5%	13%	3.498	1.832
There are clear roles for the leadership of the national & county governments	26%	10.8%	13.3%	30.2%	19.7%	3.698	1.173
Sometimes matters are politicized	13.7%	16.5%	13.3%	43.5%	13%	3.871	1.238
Overall mean 3.25							

2. Service Delivery

The respondents were asked to indicate their level of agreement with the statements on service delivery. Secondary data from records was also reviewed. The findings are indicated in the table below. The findings indicate that 41.7% of the respondents disagreed with the statement that devolution has unlocked potential in healthcare and the citizens are beneficiaries of the same at (M= 2.790, SD=1.215). A total majority at 54.4% of the respondents agreed with the statement that devolution has brought healthcare services closer to the citizens at (M= 3.968, SD=1.465).

On the question: Do the services offered at your hospital provide what you would consider as quality healthcare? A total of 68.29% answered no. Majority explained that there were long lead times whenever patients went for services, pharmacies were slow and sometimes lacked the prescribed medication, facilities like admission beds were not adequate, the admission process was overly long and the overall level of professionalism was low. Findings agree with those by (Agarwal, & Ganesh 2017). They opine that service delivery can be enhanced if quality healthcare strategies are put in place using the measures of process, structure and outcome.

The overall mean was 3.38. The highest mean was 3.968, meaning that most respondents agreed with the statement: devolution has brought services closer to the citizens. The lowest mean was 2.790, meaning that most respondents disagreed with the statement: devolution has unlocked potential in healthcare and the citizens are beneficiaries of the same.

Table 6 Quality of Healthcare Services

Statements	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std. Dev.
Devolution has unlocked potential in healthcare and the citizens are beneficiaries of the same	15.7%	26%	25.9%	20.8%	10.7%	2.790	1.215
Devolution has brought healthcare services closer to the citizens	21.4%	13.3%	11.4%	45.6%	8.8%	3.968	1.465

Overall mean 3.38

Healthcare Affordability

The respondents were asked to indicate their level of agreement with the statements on healthcare affordability. The findings are indicated in table 4.18 below. The findings indicate that 51.8% of the respondents agreed with the statement that devolution has made healthcare services more affordable at (M=2.777, SD=1.040). Another 46.5% agreed with the statement the number of babies delivered in the hospital has increased after devolution at (M=2.869, SD=1.018). A total of 39.95% agreed with the statement that since devolution, the hospital has increased the number of outreach services in order to promote preventive healthcare at (M=3.698, SD=1.173).

The overall mean was 3.11. The highest mean was 3.698, meaning that most respondents agreed with the statement: since devolution, the hospital has increased the number of outreach services in order to promote preventive healthcare. The lowest mean was 2.777, meaning that most respondents disagreed with the statement: devolution has made healthcare services more affordable.

Table 7 Healthcare Affordability

Statements	1	2	3	4	5	Mean	Std. Dev.
Devolution has made healthcare services more affordable	24.7%	10.7%	14.7%	28.8%	23%	2.777	1.040
The number of babies delivered in the hospital has increased after devolution	13.3%	26.5%	13.3%	33.5%	13%	2.869	1.018
Since devolution, the hospital has increased the number of outreach services in order to promote preventive healthcare.	16%	10.8%	23.3%	20.2%	19.7%	3.698	1.173

Overall mean 3.11

Availability of Drugs

The respondents were asked to indicate their level of agreement with the statements on the availability of drugs. The findings are indicated in the table below. A total of 49.8% of the respondents disagreed with the statement- the doctor is at will to prescribe the best drugs since the pharmacy is well-stocked at (M=2.781, SD=1.012). Another 51.3% of the respondents disagreed with the statement the patients do not have to purchase drugs outside the hospital since healthcare was devolved at (M=2.312, SD=1.351).

The overall mean was 2.55. The highest mean was 2.781, meaning that most respondents agreed with the statement: the doctor is at will to prescribe the best drugs since the pharmacy is well-stocked. The lowest mean was 2.312, meaning that most respondents disagree with the statement: the patients do not have to purchase drugs outside the hospital since healthcare was devolved

Table 8 Availability of Drugs

Statements	1 (SD)	2 (D)	3 (N)	4 (A)	5 (SA)	Mean	Std. Dev.
The doctor is at will to prescribe the best drugs since the pharmacy is well-stocked	23.3%	26.5%	13.3%	23.5%	13%	2.781	1.012

The patients do not have to purchase drugs outside the hospital since healthcare was devolved.

Overall mean 2.55

4.2 Test for Hypothesis

1. Test for Hypothesis One

The hypothesis of the study was H_{01} Devolved Human Resource for Health (HRH) has no significant influence on service delivery in the county government hospitals in Kenya. To test this hypothesis, the study regressed Human Resource for Health with service delivery. The findings in table below show that the value of adjusted R^2 was 0.568. This implies that 56.8% of variations in service delivery in the healthcare sector can be attributed to changes in devolved HRH. The remaining 43.2% variations in service delivery can be attributed to other aspects other than devolved HRH. The study finding concurs with Elrabi and Johari (2014) that if human resources management is effective, the impact on healthcare quality is greater and hence the need for HRH to undergo periodic training to increase their motivation, and in turn service delivery.

Table 9 Model Summary for Human Resource for Health and Service Delivery

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.755 ^a	.570	.568	.23019

a. Predictors: (Constant), HR for Health

Analysis of Variance (ANOVA)

From the ANOVA findings, the p-value obtained was 0.00 which is less than 0.05, an indication that the model was significant. The findings also show that the f-statistic value (22.011) is greater than the F-critical value ($F_{1,213}=3.885$). Since the f-statistic value is greater than the f-critical value it shows that the model is reliable and shows goodness of fit. Human resources for Health can be used to predict service delivery in the county government hospitals in Kenya.

Table 10: ANOVA for HR for Health on Service Delivery

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1.167	1	1.167	22.011	.000 ^b
Residual	11.289	333	0.053		
Total	12.456	334			

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), HR for Health

Beta Coefficients

From the equation below, when HR for Health is held to a constant zero, service delivery in the health sector in Kenya will be at a constant value of 1.745. The findings also show that a unit improvement in the HR for Health will lead to a 0.507 unit increase in service delivery in the county government hospitals in Kenya. The findings also show that the t-statistic (4.979) has a p-value (0.00) which is less than the selected level of significance (0.05). Therefore, we reject the null hypothesis (H_{02}) and accept the second alternative hypothesis (H_{A2}). The conclusion is that devolved HR for Health has a positive significant effect on service delivery in the county government hospitals in Kenya.

Table 11 Coefficients for HR for Health on Service Delivery

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.
	B	Std. Error	Beta	
1 (Constant)	1.745	0.193	9.041	.000
HR for Health	0.507	0.142	4.979	.000

a. Dependent Variable: Service Delivery

From the coefficients table, the following model was fitted;

$$Y = 1.745 + 0.507X_2 + \varepsilon$$

2. Test for Hypothesis Two

The second hypothesis stated that: **H₀₂**: There is no significant moderating influence of intergovernmental leadership on the relationship between devolved human resources for health and service delivery in county government hospitals in Kenya. On the variable devolved human resources for health, the findings show that moderated variable (devolved human resources for health*intergovernmental leadership) has a positive influence on service delivery in county government public hospitals in Kenya ($\beta = 0.308$). The influence was significant since the p-value obtained ($P = 0.00$) was less than the selected level of significance (0.05). Therefore, the introduction of intergovernmental leadership as moderating variable on devolved human resources for health 0.308 units of service delivery compared to 0.245 explained when the variable is not moderated (model 1). The study therefore deduces that, intergovernmental leadership has a positive influence on the relationship between devolved healthcare finance and service delivery in county government hospitals in Kenya. Therefore, we accept the alternative hypothesis: Intergovernmental leadership has positive significant effect on the relationship between devolved healthcare finance and service delivery in county government hospitals in Kenya

Table 12. Moderated Coefficients for Overall Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.484	.153		9.699	.000
Devolved HR for Health	.245	.075	.256	3.242	.001
2 (Constant)	0.854	0.189		4.519	0.004
Devolved HRH*Inter.LS	0.308	0.066	0.226	4.667	0.002

a. Dependent Variable: Service Delivery

Key: HC-Healthcare; HRH-Healthcare Human Resource; Inter.LS- Intergovernmental Leadership

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion of the Study

The study found that devolved human resources for health had a strong positive significant relationship with service delivery with $r = 0.755$. The study further found that the influence was significant since $p = 0.000$ which was less than the conventional 0.05 level of significance for this study, and that the variable could significantly predict service delivery ($R^2 = 56.8\%$). From the regression findings, the study established that a unit increase in devolved human resources for health resulted in a 0.507 increase in service delivery. Also, when the variable was moderated with intergovernmental leadership, the model was still significant and it explained more variation in service delivery, suggesting that it was positively moderated.

This study provided evidence that devolved human resources for health positively increased service delivery. This study, therefore, concluded that devolved human resources for health reinforces the aspects of service delivery including the quality of healthcare services, healthcare affordability, availability of drugs, reduction of lead time as well as goal/target/objective achievement in county government health facilities.

The study also concludes that right levels of medical staff, in terms of both quality and quantity, positively influence service delivery. Hospitals having the right numbers and quality based on staff establishment for non- medical staff members positively influence service delivery. The study also established that if members of staff are well-remunerated, and the county government adequately invests in employee growth through continuous employee training and skills development, then service delivery will improve. If growth and advancement in the organization is by merit, then there will be improvement in service delivery.

5.2 Recommendations of the Study

Proficient human resources are key in healthcare if service delivery has to be at its best. The study recommends that there is need for adequate staffing for both medical and non- medical staff to ensure

Research Bridge Publisher, International Journal of Innovations and Interdisciplinary Research, Vol. 3, Issue 1, pp: (44-58), Month: January-December 2025, Available at: <https://researchbridgepublisher.com/> provision of effective healthcare. The study recommends that the staff establishment should be adhered to when recruiting so as to improve the service delivery. The study also recommends that there is need for specialist medics' numbers to be increased for service delivery to improve. Career growth must also be purely on merit.

On employee compensation and development, the study recommends that staff members need better remuneration that is commensurate with their services. There is also need for the government to invest in employee growth through continuous employee training and skills development. Leadership should explore ways to ensure that devolution of the HR function is restructured to ensure improvement in the working conditions in hospitals. It is also important that employees at all levels should be involved in driving the hospital's goals since each level of employees has its own unique contribution.

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