

Influence of Devolved Human Resource Governance Structure on Service Delivery in the Public Health Sector in Kenya

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Abstract

The purpose of the study was to establish the influence of devolved human resource governance structure on service delivery in the public health sector in the County government of Trans Nzoia, Kenya. The study was anchored on sequential theory of decentralization and adopted embedded mixed methods research design. The target population was 663 respondents comprising of 15 hospital administrators, 16 doctors, 50 clinical officers, 240 nurses and 342 patient care givers in all the 74 public health care facilities in the County government of Trans Nzoia. Stratified random sampling technique was used to select the study sample. A total of 331 respondents comprising of 8 administrators, 8 doctors, 19 clinical officers 148 nurses and 148 patient care givers were sampled from 74 public health facilities for study. Out of the sample size of 331 of respondents, 281 participated giving a response rate of 85 percent. Data was collected using questionnaires and document analysis guide. Validity of data collection instruments was determined by experts and peers, and the tool modified accordingly after a pilot study in the neighboring Bungoma County. Reliability was established using Cronbach Alpha technique. Both descriptive and inferential statistics were used in data analysis with the help of SPSS program version 21. Descriptive statistics involved frequencies, percentages, means and standard deviation while inferential statistics involved the use of Spearman rank order correlation, simple and multiple regressions. Data was presented using tables. Study findings revealed that health care service delivery was not satisfactory. Devolved human resource governance structure had not been fully implemented. The study established that implementation of devolved human resource significantly influenced service delivery in the health sector. The study recommended that county governments should ensure adequate staffing, motivation and equipping of health facilities to enhance service delivery. Both the medical and support staff should be trained, compensated and equipped appropriately for designated roles.

Keywords: Devolved human resource governance structure, service delivery in the health sector

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1.1 INTRODUCTION

Decentralization is the process by which the activities of a government or an organization are distributed or delegated away from a central authoritative location or group, particularly with regard to authority, planning and decision-making. In government, decentralization is the transfer of authority and responsibility for public functions from the central government to subordinate or quasi-independent government organizations and/or the private sector. Decentralization has been recognized as an important subject matter of governance in both developed and developing countries of the world (Dasgupta and Victoria, 2007). It has been advocated as a political response to the ills plaguing fragile and plural societies, including conflicts, inequalities, economic stagnation, corruption and inefficient use of resources (Institute of Economic Affairs (IEA), 2010). Decentralization has been identified by most governments as a strategy to enhance service delivery in Key sectors such as health.

In Pakistan, the government introduced devolution in 2001 after the military regime promulgated local government plan in 2000 (Wanja, Mwaura and Oluoch, 2019). The main aim for devolution was to expand democracy to lower levels to enhance accountability and service delivery in different sectors including health care. In line with devolved governance, health care services were devolved from provincial administration to districts (Ansari, 2011). A report compiled in 2007 pointed out that devolved governance had not realized its performance indicators in the health sector. It also indicated that there existed persistent challenges in the implementation of devolution which impeded effective service delivery in the health sector. The report further pointed out that although major provincial government responsibilities had been devolved to districts, the transfer was not accompanied with requisite funding. This hampered devolution and negatively impacted on service delivery in the health sector and other departments.

In Sub Saharan Africa, many countries face a number of challenges with regard to access to quality public

health care (WHO, 2014). Thus, the need for a strong health care system and work force that can deliver health care services reliably and consistently cannot be underscored. According to World health organization (2015), the region lacks well equipped education systems to train health care professionals to address the needs of the 21st century. As a result, a number of countries in Africa have adopted a decentralized system of governance in the health sector to address the challenges being experienced. Decentralized system of governance was aimed at addressing the managerial, operational and political issues that resulted to systemic inefficiencies in the health sector. Decentralization, arguably, improves governance and provision of public service. This could be achieved through better matching of public services to local preferences and increased accountability of local governments to citizens.

In Kenya, the architect of the 2010 constitution chose devolution to defuse ethnic and regional tensions (Sihanya, 2010). Technical rationale was also in mind as service provision efficiency and a bigger role of citizen participation in decision-making process. The Fourth schedule of the constitution provided specific guidance on which services the county or national governments would provide. In the health sector, essential health service provision was assigned to county governments, while the national government retained health policy, technical assistance to counties and management of national referral health facilities. Devolution marked a departure from the system that existed before the 2010 constitution. Devolution was expected to change the process of human resource management and promote quality of service delivery in the health sector. The study examined the extent of implementation of devolved human resource structure and its influence on service delivery in the health sector.

1.2 Statement of the problem

Kenya was a highly centralized economy between 1963 and 2010, which resulted in uneven development (World Bank, 2012). The centralized system led to weak, unresponsive and inequitable provision of services, including health (Ndavi et al, 2009). It was noted by Noor et al (2006) that only 63% of Kenyans had access to government health care facilities located within an hour's travel from their houses. The 2010 constitution of Kenya expected the 47 devolved governments to stimulate innovation in the health system through improved efficiency, effectiveness, access to quality services, and promotion of accountability and transparency in service delivery (Bossert, 1998). The constitution assigned health service delivery to the counties and left policy matters, referral hospitals and capacity building to the national government (Constitution of Kenya, 2010, Schedule 4). The transfer of health services to counties was effected at once, in August, 2013, irrespective of the counties' level of preparedness. The 2010 Constitution, in line with Vision 2030, promised all Kenyans, regardless of their economic status, the highest standards of quality health care service that would be accessible, affordable, available, and acceptable. This is equivalent to provision of Universal Health Services as defined by the World Health Organization (WHO) standards.

The health sector however in nearly all counties in Kenya is bedeviled with monumental challenges ranging from capacity gaps, human resource deficiency, lack of critical legal infrastructure, rampant corruption and a conflicting relationship between County governments and national government (Williamson and Mulaki, 2015). Omondi (2006) observed that there was a slow pace in service provision, inadequate drug supplies, delayed payment of dues, inadequate working equipment, low morale and staff turnover. Wamai (2009) also observed that the government expenditure in the health sector was on a steady decline, from 8.0% of its GDP in 2001 to 4.6% in 2010, despite Kenya's commitment to increase this to 15%, in line with the 1987 Bamako initiative. The deliberate endeavor by the Government of Kenya to strengthen acquisition and management of medical products, vaccines and technologies by the Kenya Medical Supplies Authority (KEMSA) has not yielded positive results. The paper sought to establish extent of implementation of devolved financial governance structure and its influence on service delivery in public health sector.

1.3 Research objective

The study was guided by the following research objective:

1. To establish the influence of devolved human resource structure on service delivery in the public health sector of the County Government of Trans Nzoia, Kenya.

1.4 Research hypothesis

The study tested the following null hypothesis:

- H0: Implementation of devolved human resource governance structure does not have a significant influence on service delivery in the public health sector of the County Government of Trans Nzoia, Kenya.

1.5 Justification of the study

Since the inception of devolved governance in the health sector, little has been documented on the extent of implementation of devolved human resource governance structures. Scholars such as Sang (2018) have pointed out that it is difficult to access studies that have been done to ascertain the effectiveness of devolved governance

in the health care system. In line with the 2018 policy brief report (KEMRI, 2018), policy makers need information on effectiveness of devolved human resource governance on service delivery in the health sector. This will inform decision making in order to address challenges facing devolved human resource governance in the health sector. KEMRI (2018) report pointed out further that there is need to monitor the actual implementation experiences of devolution and how it impacted on service delivery in the health care.

1.6 Significance of the study

Findings of the study will provide vital information to the County governments on the extent to which devolved human resource governance structure has been implemented. The findings of the study will also inform the management of the health sector on the relationship between implementation of devolved human resources structure and service delivery in the health sector. This will provide an insight on how human resources affect service delivery in the health sector.

1.7 The scope of the study

This study examined the influence of devolved human resource governance structure on service delivery in the public health sector. The study targeted 74 public health facilities in the county government of Trans- Nzoia, Kenya. The target population of the study comprised of health care managers, providers and patient care givers in all the 74 public health facilities of Trans Nzoia County government. The study was conducted in level 2, level 3 and level 4. Level one was left out because it is not funded by county governments. Level 5 was not yet in operation the time when the study was done thus there were no respondents to provide data.

1.8 Limitations of the study

The geographical area of the study had only one level 5 health facility which was not yet in operation at the time the study was undertaken. Therefore findings and conclusions of the study were based on level 2, level3 and level 4 health facilities which were in operation. This limits the replicability of the study particularly to cases where level 5 health facilities are involved.

The unit of analysis for the study included health care administrators, doctors, nurses and patients care givers. However in some health facilities particularly level 2 and level 3, some important units of analysis such as administrators and doctors were not available. As a result, the nurses in charge were involved in the study. Furthermore, some health facilities lacked the in-patient mode of treatment hence only out-patient care givers were involved.

1.9 Theoretical framework

The study was guided by sequential theory of decentralization which was proposed by Falleti (2004). The theory contents that decentralization is a set of reforms that aims at transferring responsibilities, resources, or authority from higher to lower levels of system over along time. As such, decentralization does not include transfer of authority to non-state actors (as in the case of privatization reforms). Fillet (2004), entitled sequential theory of decentralization and its effects on the intergovernmental balance of power was carried out in Colombia, Brazil, Mexico and Argentina in 2004. The major conclusion of the theory is that although both critics of decentralization assume that decentralization automatically increases the power and impact of sub-national governments, the extent however varies from substantial to insufficient. The theory contents that decentralization is a set of reforms that aim at transferring responsibilities resources or authority from higher to lower level of system.

According to the theory, political decentralization comprises of the set of constitutional amendments and electoral reforms designed to open new frontiers in decentralization. Political decentralization policies are also designed and devolved to electoral capacities to sub national actors. Administrative decentralization comprises of a set of policies which transfers the administration and delivery of social services such as education, health, social welfare or housing to sub-national government, and may include decision making over these policies. The theory has three main characteristics; it describes decentralization as a process, takes into account territorial interests of bargaining actors and incorporates policy feedback effects in the analysis of bargaining situations, in addition to providing a dynamic account of institutional evolution. Decentralization can be considered as a set of policy reforms aimed at transferring responsibilities, resources, or authority from higher to lower levels of government. Alternatively, it can be looked at as a set of reforms which can take place in authoritarian as well as democratic contexts. The study adopted the theory because it strongly advocates for decentralization of governance which includes devolution of human resource governance.

2. LITERATURE REVIEW

Human resources for health are defined as the stock of all people engaged in actions whose primary intent is to enhance health. An adequate, productive, and equitably distributed pool of health workers who are accessible is necessary for the effective delivery of healthcare. According to Moore, (2011), human resource governance refers

to the process and practice introduced by an organization in determining the roles, authority, responsibilities, decision-making, and ultimately the accountability of all employees and management for the benefit of its stakeholders. An efficient human resource governance system is expected to provide the institution with a structure and the ability to meet business needs through management of its health work force. Its six main functions are essentially in the areas of recruitment, workplace safety, employee relations, compensation, labour compliance and training. In devolved system in Kenya, the county public service board with other relevant institutions are expected to put in place the norms and standards for human resource including; adequacy of staff, skills mix, competencies and attitude towards health.

Studies have been done to examine how human resource affects service provision in the health sector. Sundari and Rao (2017), in their conceptual study on Human Resource Management in Health Care in India set out to understand the importance of human resources in this sector. The study recommends that management of HR enables the efficient provision of health care services to the patients and achieve patient satisfaction. The top management in hospitals should have a clear vision and formulate strategies. The objectives of the organizations are to be made clear to all the levels of employees. More emphasis on periodic accomplishment reviews and guidance and growth of doctors, nurses and paramedics would improve quality of health care services. In Malaysia, a study by Elarabi and Johari (2014) reported that effective human resources management had a strong impact on healthcare quality and in improving the accomplishment of hospital's staff. The study recommended the need to measure the accomplishment of managers of human resources department in the hospital before starting accomplishment development process as well as continuous development and training of staff accomplishment.

In Kenya, Ngugi (2017) pointed out that there is critical shortage of health workforce in Baringo County. The study further established that health work force is not enough and also lacks adequate training to meet the needs on the labour market. The study pointed out that Capacity building initiatives in the health area have largely been characterized by inadequate or lack of needs assessment largely because they have been initiated by private partners. However, sustainability of such initiatives is not guaranteed at the expiry of the programmes. The study also pointed out that Capacity building has great financial implications. It's hence important for MoH and partners to mobilize funds to capacity build its personnel so that the area can fulfill its mandate. This study examined implementation of devolved human resource structures and its influence on service provision in the health area of Trans Nzoia County.

Similarly, Latif, Simiyu and Waris (2017) reported that there were inadequate HIV/AIDS skills among community health workers trained on community strategy developed by the government of Kenya. Study findings revealed that provision for HIV/AIDS training manual was shallow and sketchy. This could not offer adequate training to community health workers. As a result, service provision on HIV/AIDS was found to be poor as the service providers had no capacity to attend to patients as needed. Inadequate funding of Cherangany sub County also contributed to poor service provision in the health area. Hospitals were found to be lacking basic health facilities due to poor funding from the central government. Findings on health service provision in Cherangany sub County inform this study on the state of things in some of the sub Counties in Trans Nzoia County. Reviewed study however only focused on one sub County while this study targeted all sub Counties in Trans Nzoia County.

Kimathi (2017), reported that capacity gaps, lack of infrastructure and personnel, conflicting relationships with national government and a lack of understanding of devolution among citizens are the main challenges in devolved health sector in Kenya. Alande, (2017), researched on the role of human Resource Management in devolution of counties in Kenya. The study results indicated that Mombasa County had achieved very little in terms of Development and a complete neglect of the Human Resource Department in terms of major decisions in the County and lack of systems in place to further the devolution agenda, lack of guidance and growth of county officers. The researcher therefore recommended allocation of more funds towards the growth and development of the county officers, Empowerment of Human Resource Department, Hiring of the right personnel and an accomplishment management approach in employee assessment. It is therefore clear that there is no devolution without the Key Human Resource functions in place in the counties and the need to empower the Department across all the Counties to manage the said functions. Awino (2016) carried out a study on response strategies adopted by the Ministry of health to challenges of devolved health care services in Kenya. Findings of the study revealed that governance and leadership gaps, frequent industrial strikes by health care workers and financial constraints and delays are among challenges facing health care services. From the findings of the study, human resource management is one of the challenges facing health care provision in Kenya. Frequent strikes as revealed from the reviewed study points on dissatisfaction of human resource. This in turn affects service provision in the health sector.

Kinyili, Karanja and Namusonge (2015), in their study on the role of human resource management practices on retention of staff in public health institutions in Machakos County, reported that there were weak but statistically significant positive relationships between remuneration practices, career advancement practices, work environment management practices and work-life balance practices and retention. The reward practices, career advancement practices, work environment management practices and work-life balance practices in place were

found to be unsatisfactory. Other HRM practices such as leadership, employee involvement, accomplishment management were also said to influence retention in the health care facilities. Based on these findings, it was recommended that Machakos county government should look into the aspects of remuneration, career advancement, work environment and working life balance practices and put in place mechanisms that would address these practices and thus minimize their negative effects on staff satisfaction and commitment, hence retention in the health care institutions in the county. Simiyu and Muronge (2015) reported that reward had the strongest positive influence on employee accomplishment in the health area. In addition, recruitment process, training and work environment were beneficially related to accomplishment in the health area. The study concluded that good reward systems, recruitment process, training and work environment affect the accomplishment of the employees beneficially. The study recommended that to improve employee accomplishment, the management of the health institutions should make sure that all the employees undergo training exercises, that the employees should be rewarded and be given other benefits such as health insurance, sick leave, annual leave, and maternity leave to motivate them.

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Research design

The study adopted mixed methods research design. Mixed methods design is a type of research in which both qualitative and quantitative research designs and methods are used in combination in a single study to answer the research questions.

3.2 Target population

The study targeted 663 respondents comprising of health care practitioners and patient care givers from all the 74 public health facilities funded by the taxpayers in the county government of Trans Nzoia. The respondents in the facilities were healthcare managers, providers and patient care givers in the public level 2, level 3, and level 4 health care facilities in the County government of Trans Nzoia.

3.3 Sample and sampling techniques

Stratified random sampling technique was used to select the study sample. All the 74 health facilities were stratified based on levels then simple random sampling techniques was used to draw a representative sample of health care providers and patients' care givers in each stratum. A total of 331 respondents comprising of 8 administrators, 19 clinical officers, 148 nurses and 148 patient care givers were sampled from the 74 public health facilities for study. Table 3.1 illustrates the sample size of the study.

Table 3.1: The sample size

	Facilities	Administrators	Doctors/ CO	Nurses	Patient Care Takers	Total
Level 2	55	0	0	110	110	220
Level 3	11	0	11	22	22	55
Level 4	8	8	16	16	16	56
Total	74	8	27	148	148	331

3.4 Data collection instruments

Data was collected using questionnaires, checklist and document analysis guide. Two questionnaires for health care practitioners and patient care givers were used to collect data for the study. Questionnaire for administrators and service providers were used to obtain data on implementation of devolved governance structures in the public health sector. On the other hand, questionnaire for patients was used to obtain data on service provision in the public health sector. Orodho, (2005) observed that questionnaires have a major advantage of time efficiency and anonymity. The checklist was used to establish the adequacy of health care equipments in public health facilities. The checklist was preferred based on the fact that it provides first hand data. Document analysis guide was used in this study to assess the adequacy and quality of staff in public health facilities. It also enabled the researcher to determine evidence of capacity building programmes. Through the document analysis guide, the researcher determined availability of public participation committees, budget committees and audit committees.

3.5 Validity of research instruments

The draft instrument was tried out on four public health facilities from the neighboring Bungoma County. All the four hospitals were level four, where all cadres of staff, ranging from nurses to doctors were found. In each hospital, three respondents were selected to answer the questionnaire, making a total of 12 respondents for the pilot. Respondents comprised of hospital administrators, doctors, nurses and patient care takers. Piloting helped to establish if: there were any items in the research instruments that were ambiguous; if there were any problems and complexity that could be encountered during data collection and analysis and if the research instruments were

reliable. It also helped to determine whether items in the data collection instruments were clear, appropriate and suitable to the targeted respondents. Responses to the question items in the pilot study were subjected to item analysis to determine whether they were clear to the respondents and whether they measured what they were intended to measure. This helped to improve on validity and reliability of the instruments results by identifying potential problems with the methods, logistics and the data collection instrument itself.

3.6 Validity of data collection instruments' results

In order to ensure validity of instrument results, a committee of three research colleagues and two health care practitioners was set up to validate the questionnaire. The questionnaire was the main research instrument for the study. The committee evaluated the questionnaire by checking on clarity of instructions, appropriateness and relevancy of items in the questionnaire in answering the research questions. They also checked on the sequencing of the items, wording of the items and question spacing of the data collection instruments. Items were then corrected in line with the observations of the committee which consisted of supervisors and experts in the field of governance.

3.7 Reliability of data collection instruments

Reliability refers to the ability of a measurement instrument to produce the same answer in the same circumstances, time after time (Kothari, 2004). This means that if people answered a question the same way on repeated occasions, then the instrument can be said to be reliable. Kothari (2004) further argued that reliability is consistency of measurement; the more reliable an instrument is, the more consistent the measure. In this study, reliability was determined using Cronbach Alpha. A reliability score of 0.7 meant that the instrument results are reliable. In this study all the structures had a reliability index of greater than 0.7. Items were therefore reliable.

3.8 Data analysis procedure

Data obtained from the field was first sorted, coded and entries keyed in using SPSS program version 21.0. In this study, data was analyzed using both descriptive and inferential statistics. Descriptive statistics involved the use of frequencies, percentages and means while inferential statistics involved use of Spearman correlation, simple and multiple linear regressions. Inferential statistics were used to test the research hypothesis at 0.05 level of significance.

4. PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Respondents Demographics

The study examined the respondents' demographic data in order to understand how respondents were distributed across the demographic characteristics. The respondents to the study comprised of administrators, doctors, clinical officers and nurses. Demographic data was analyzed using descriptive statistics.

Table 4.1: Distribution of medical personnel by professional qualification

Qualification	Frequency	Percent
Administrator	8	3.8
Medical doctor	10	4.8
Clinical officer	43	20.7
Nurse	118	56.7
Others	29	13.9
Total	208	100.0

As indicated in Table 4.1, more than half 118(56.7%) of the study respondents were nurses, 43 (20.7%) were clinical officers while 29 (13.9%) were others. Among the 29 other medical personnel, there were 10 human resource officers, 2 physiotherapists, 16 laboratory technicians and 1 social worker.

4.2 Service delivery in the health sector

The study sought to establish the status of service delivery in the health sector of the county government of Trans Nzoia. The rating was based on a five point Lykert which was determined as follows; Strongly agree (SA)-5, agree (A)-4, undecided (U)-3, disagree (D)-2 and strongly disagree (SD)-1. Study findings were as illustrated in Table 4.2

Table 4.2: Responses on service delivery in the health sector

The rating was based on a five point lykert which was determined as follows; Strongly agree (SA)-5, agree (A)-4, undecided (U)-3, disagree (D)-2 and strongly disagree (SD)-1.

No.	Statements on service delivery	SA	A	U	D	SD	Mean	SD
		Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)		
1.	Health facilities are closer to people	23(20.5)	67(59.8)	1(0.9)	15(13.4)	6(5.4)	3.77	1.09
2.	Drugs are available in health facilities	4(3.6)	50(44.6)	11(9.8)	34(30.4)	13(11.6)	2.98	1.17
3.	Services are affordable	16(14.3)	65(58.0)	5(4.5)	21(18.8)	5(4.5)	3.59	1.09
4.	Waiting times are short	19(17.0)	52(46.4)	4(3.6)	26(23.2)	11(9.8)	3.38	1.28
5.	Enough beds	7(6.3)	24(21.4)	24(21.4)	30(26.8)	27(24.1)	2.59	1.24
6.	Prevention & Vaccination services available	34(30.4)	69(61.6)	3(2.7)	4(3.6)	2(1.8)	4.15	.79
7.	Prompt response to emergencies	14(12.5)	70(62.5)	9(8.0)	15(13.4)	4(3.6)	3.67	.98
8.	Health infrastructure improved after devolution	7(6.3)	54(48.2)	3(2.7)	37(33.0)	11(9.8)	3.08	1.21
9.	Medical supplies are readily available	9(8.0)	40(35.7)	10(8.9)	42(37.5)	11(9.8)	2.95	1.20
10.	Adequate medical personnel and staff	8(7.1)	33(29.5)	13(11.6)	44(39.3)	14(12.5)	2.79	1.20
11.	Employees attend to patients promptly	15(13.4)	74(66.1)	5(4.5)	17(15.2)	1(0.9)	3.76	.90
12.	Patient care services have improved	11(9.8)	65(58.0)	4(3.6)	28(25.0)	4(3.6)	3.46	1.08
13.	Staff attend to patients with courtesy	17(15.2)	78(69.6)	5(4.5)	11(9.8)	1(0.9)	3.88	.81
14.	Hospital staff is competent	18(16.1)	80(71.4)	7(6.3)	5(4.5)	2(1.8)	3.96	.75
15.	Ambulance services are affordable	10(8.9)	57(50.9)	7(6.3)	32(28.6)	6(5.4)	3.29	1.14
16.	Cleanliness and sanitation has improved	12(10.7)	69(61.6)	5(4.5)	21(18.8)	5(4.5)	3.55	1.06
17.	Health facilities linked to accessible roads	13(11.6)	48(42.9)	7(6.3)	33(29.5)	11(9.8)	3.17	1.25
18.	Ease of access to medical specialists	5(4.5)	38(33.9)	10(8.9)	29(25.9)	30(26.9)	2.63	1.32
19.	Referral services are available and prompt	12(10.7)	63(56.3)	10(8.9)	23(20.5)	4(3.6)	3.50	1.05
20.	Integration of ICT promoted efficiency	8(7.1)	32(28.6)	17(15.2)	18(16.1)	37(33.0)	2.61	1.38
Mean							3.34	

Patients' care givers' were requested to rate the service delivery of health care services in the health care facilities in Trans Nzoia County. Study findings on service delivery in the health facilities illustrated in Table 4.2 revealed that the mean rating on whether health facilities were closer enough to where they come from revealed that 20.5 percent strongly agreed, 59.8 percent agreed, 0.9 percent were neutral, 13.4 disagreed and 5.4 strongly disagreed. Findings of the study summed up to a mean of 3.77 which implied that most respondents agreed with the statement. This meant that most of the citizens in Trans Nzoia County have access to public health facilities. The county Government has established health centers in every sub county and dispensaries in every ward. This infrastructure development initiative has ensured access to county health care facilities. This finding is attributable to fruits of devolved governance in the health sector. Accessibility to health services is one of the criterion used by WHO as quality for health services.

When asked on whether drugs are readily available in public health facilities, study findings revealed that 3.6 percent strongly agreed with the statement, 44.6 percent agreed, 9.8 percent were neutral, 30.4 percent disagreed and 11.6 percent strongly disagreed with the statement. The mean rating was 2.98 which was slightly above average thus implying that the respondents who agreed with the statement were almost equal to those who disagreed with the statement. This implied that drugs may be available in some health facilities and others were not well supplied.

Drug supplies are perennial challenges faced by most County Governments. It has been difficult to balance demand and supply of drugs due to budgetary allocation deficits and disbursement delays.

Findings of the study on whether medical services are affordable in the public health sector revealed that 14.3 percent strongly agreed with the statement, 58.0 percent agreed, 4.5 percent were neutral, 18.8 percent disagreed and 4.5 percent strongly disagreed with the statement. The mean rating was 3.59 which showed that respondents who agreed with the statement were more than those who disagreed. This implied that medical services in public health facilities are affordable. Access and affordability of devolved health services is one of key objects in the devolved health services. This finding reveals devolution gains experienced by the County Government of Trans Nzoia. Study findings on whether patients are served on time at the health facilities revealed that the 17.0 percent strongly agreed, 46.4 agreed, 3.6 percent were neutral, 23.2 percent disagreed and 9.8 percent strongly disagreed. The mean response rating was 3.38 which implied that more respondents agreed with the statement. This meant that there are no long queues at health facilities. Availability and accessibility of health services enhances service delivery. The public are served as they come and within the time stipulated in the service delivery charter.

Study findings on whether there are enough beds for in-patients in health facilities revealed that 6.3 percent strongly agreed with the statement, 21.4 percent agreed, 21.4 percent were neutral, 26.8 percent disagreed and 24.1 percent strongly disagreed. The findings summed up to a mean rating of 2.59 which was low thus implying that respondents disagreed with the statement. This meant that there were no enough beds for in-patients. This implied that patients may be sharing beds in some health facilities in the County government of Trans Nzoia. More investment is required to increase in-patient absorption capacity. The referral and teaching hospital when completed and operationalized will go a long way to ease congestion in the County health facilities.

On whether prevention and Vaccination services were available for the community, study findings revealed that 30.4 percent strongly agreed with the statement, 61.6 percent agreed, 2.7 percent were neutral, 3.6 percent disagreed and 1.8 percent strongly disagreed. The mean rating was 4.15 which implied that respondents agreed with the statement. This showed that prevention and vaccination services were available in the public health sector of the County government of Trans Nzoia. Findings of the study on whether there is prompt response to emergencies revealed that 12.5 percent of the respondents strongly agreed with the statement, 62.5 percent agreed, 8.0 percent were neutral, 13.4 percent disagreed and 3.6 percent strongly disagreed. Study findings summed up to a mean response rating of 3.67 which implied that most respondents agreed with the statement. This showed that there was prompt response to emergencies in most health facilities. On whether ambulance services were available and affordable, 8.9 percent strongly agreed with the statement, 50.9 percent agreed, 6.3 percent were neutral, 28.6 percent disagreed and 5.4 percent strongly disagreed with the statement. The mean response rating was 3.29 which was above average thus meaning that more respondents agreed with the statement. This meant that ambulance services were available and affordable in public health facilities. The County Government of Trans Nzoia purchased five new ambulances one for each Sub County during the first year of devolution with an objective of prompt response to emergencies. The findings of the study affirm this key achievement by the County government.

Study finding on whether health infrastructure has greatly improved after devolution revealed that 6.3 percent strongly agreed with the statement, 48.2 percent agreed, 2.7 percent were neutral, 33.0 percent disagreed and 9.8 percent strongly disagreed with the statement. The overall mean rating was 3.08 which was slightly above average meaning that some respondents agreed and others disagreed with the statement. This could mean that health infrastructure could have improved in some health facilities and not in others. Since the advent of devolution the County Government has upgraded some health facilities while refurbishing others. However, due to financial constraints, the exercise is yet to cover the whole County.

Findings of the study on whether Medical supplies are readily available revealed that 8.0 percent strongly agreed with the statement, 35.7 percent agreed, 8.9 percent were neutral, 37.5 percent disagreed and 9.8 percent strongly disagreed with the statement. Findings summed up to a mean of 2.95 which implied that the number of respondents who agreed with the statement was higher than those who disagreed. This meant that medical supplies could be readily available in some health facilities and not in other health facilities. On whether there is adequate medical personnel and staff, study findings revealed that 7.1 percent of the respondents strongly agreed with the statement, 29.5 percent agreed, 11.6 percent were neutral, 39.3 percent disagreed and 12.5 percent strongly with the statement. The mean rating was 2.79 which was low thus implying that the medical staff were not adequate in health facilities. Due to high wage bill, recruitment of health staff has been a tall order. However, critical areas in the health sector are being filled on need basis.

Study findings on whether employees of the health facilities attend to patients promptly revealed that 13.4 percent strongly agreed with the statement, 66.1 percent agreed, 4.5 percent were neutral, 15.2 percent disagreed and 0.9 percent strongly disagreed with the statement. Responses summed up to a mean of 3.76 which was above average implying that many respondents agreed with the statement. This therefore meant that employees of the health facilities attend to patients promptly. The mean rating on whether Patient care services have improved was 3.46 implying that most respondents agreed with the statement. This meant that patient care services had improved after devolution. Study findings on whether hospital staffs attend to patients with courtesy revealed that 15.2

percent strongly agreed with the statement, 69.6 percent agreed, 4.5 percent were neutral, 9.8 percent disagreed and 0.9 percent strongly disagreed. Responses cumulated to a mean rating of 3.88 which was high thus implying that most of the respondents agreed with the statement. This meant that hospital staffs attend to patients with courtesy. On whether the hospital staff is competent, study findings revealed that 16.1 percent strongly agreed with the statement, 71.4 percent agreed, 6.3 percent were neutral, 28.6 percent disagreed and 5.4 percent strongly disagreed with the statement. The mean response rating was 3.96 which implied that respondents agreed with the statement. This meant that clients had confidence in the medical staff in public health facilities in Trans Nzoia County.

Study findings on whether cleanliness and sanitation of hospital facilities had improved revealed that 10.7 percent strongly agreed with the statement, 61.6 percent agreed, 4.5 percent were neutral, 18.8 percent disagreed and 4.5 percent strongly disagreed. The mean rating was 3.5536 which was above average implying that most respondents agreed with the statement. This meant that cleanliness and sanitation of hospital facilities had improved. Study findings on whether health facilities are linked to accessible road networks revealed that 11.6 percent strongly agreed, 42.9 percent agreed, 6.3 percent were neutral, 29.5 percent disagreed and 9.8 percent strongly disagreed. Study findings summed up to a mean of 3.17 which was above average hence implying that most respondents agreed with the statement. However, the mean was not very high meaning that a high number of respondents also disagreed with the statement. This meant some health facilities were linked to accessible road networks while others were not.

Study findings on whether there was ease of access to medical specialists revealed that 4.5 percent of the respondents strongly agreed, 33.9 percent agreed, 8.9 percent were neutral, 20.5 percent disagreed and 3.6 percent strongly disagreed with the statement. The mean response was 2.63 which indicated that most respondents disagreed with the statement. This implied that medical specialists were not easily accessible to patients. On whether Referral services were available and prompt, study findings revealed that 10.7 percent strongly agreed with the statement, 56.3 percent agreed, 8.9 percent were neutral, 25.9 percent disagreed and 26.9 percent strongly disagreed. Responses summed up to a mean rating of 3.50 which was high indicating that most respondents agreed with the statement. These implied that referral services were available and prompt in public health facilities. Study findings on whether Integration of ICT had made service delivery more efficient revealed that 7.1 percent of the respondents strongly agreed with the statement, 28.6 percent agreed, 15.2 percent were neutral, 16.1 percent disagreed and 33.0 percent strongly disagreed with the statement. The mean response rating was 2.61 which implied that respondents disagreed with the statement. This meant that ICT services had not been effectively integrated in public health facilities in Trans Nzoia County.

The overall mean response rating on service delivery in public health facilities was 3.34. The mean was above average meaning that service delivery in public health facilities was at a fair state. This implied that devolved governance has helped in improving service delivery in public health facilities in the County government of Trans Nzoia. However, there are still areas that need to be improved. Findings of the study were in agreement with those of Makonjo (2017) who reported that devolution had an impact on service delivery in the health sector. Findings however disagreed with Mwangi (2018) who established that service delivery was unsatisfactory in Kenyatta National due inadequate integration of ICT in the sector.

4.8.4 Implementation of devolved human resource structure in the public health sector

The study sought to establish implementation of devolved human resource structure in the health sector of the county government of Trans Nzoia. Patients' care givers rated the state of service delivery on a five point likert scale. Study findings were as illustrated in Table 4.3. Responses were rated as indicated: Strongly agree (SA)-5, agree (A)-4, undecided (U)-3, disagree (D)-2 and strongly disagree (SD)-1

Table 4.3: Responses on implementation of devolved human resource structure in the public health sector

No.	Items on devolved human resource	SA	A	U	D	SD	Mean	SD	
		Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)			
1.	The Health sector is adequately staffed	5(2.4)	11(5.3)	14(6.7)	50(24.0)	128(61.5)	1.63	.99	
2.	Appropriate mix of different cadre of staff	7(3.4)	50(24.0)	20(9.6)	53(25.5)	78(37.5)	2.30	1.29	
3.	Staff development programmes are available	5(2.4)	34(16.3)	28(13.5)	64(30.8)	77(37.0)	2.16	1.164	
4.	Staff motivation schemes are clearly adhered to	2(1.0)	18(8.7)	32(15.4)	64(30.8)	92(44.2)	1.91	1.01	
5.	Recruitment exercise of workers is done on merit	5(2.4)	30(14.4)	23(11.1)	54(26.0)	96(46.2)	2.01	1.17	
6.	The health sector is prompt in remunerations	6(2.9)	33(15.9)	20(9.6)	60(28.8)	89(42.8)	2.07	1.19	
7.	The health sector ensures timely promotion of staff	2(1.0)	20(9.6)	17(8.2)	65(31.3)	104(50.0)	1.80	1.01	
8.	The HR department employs relevant strategies to recruit and retain staff	5(2.4)	42(20.2)	33(15.9)	57(27.4)	71(34.1)	2.29	1.20	
9.	Staff is treated fairly	3(1.4)	43(20.7)	24(11.5)	65(31.3)	73(35.1)	2.22	1.18	
10.	HR department has integrated ICT to enhance service delivery	5(2.4)	39(18.8)	32(15.4)	53(25.5)	79(38.0)	2.22	1.21	
Mean							2.06		

Findings of the study on implementation of devolved human resource structure in the health sector illustrated in Table 4.3 revealed that on whether the health sector of the County government of Trans Nzoia was adequately staffed, 2.4 percent of the respondents strongly agreed, 5.3 percent agreed with, 6.7 percent were neutral, 24.0 percent disagreed and 61.5 percent strongly disagreed with the statement. The mean response rating was 1.63 which was very low, indicating that respondents disagreed with the statement. This meant that the health sector in the County government of Trans Nzoia is inadequately staffed. On whether there was an appropriate mix of different cadre of staff members in health facilities, study findings revealed that 3.4 percent of the respondents strongly agreed and 24.0 percent agreed with the statement. 9.6 percent of the respondents were neutral, 25.5 percent disagreed and 37.5 percent strongly disagreed with the statement. The mean response rating was 2.30 which was low thus indicating that respondents disagreed with the statement. This showed that there was no appropriate mix of different cadre of staff members in health facilities.

Findings of the study on whether Staff development programmes were available and accessible to members of staff in the health sector revealed that 2.4 percent of the respondents strongly agreed, 16.3 percent agreed and 13.5 percent of the respondents were neutral. 30.8 percent of the respondents disagreed and 44.2 percent of the respondents strongly disagreed with the statement. The mean response rating was 2.16 which indicated that most respondents disagreed with the statement. Study responses therefore implied that staff development programmes are not easily accessible to members of the staff. Study findings on whether staff motivation schemes are clearly outlined and adhered to by the public health sector revealed that 1.0 percent strongly agreed and 8.7 percent agreed with the statement. 15.4 percent of the respondents were neutral, 30.8 percent disagreed and 44.2 percent of the respondents strongly disagreed with the statement. The mean response rating of was 1.91 which was low hence implying that respondents disagreed with the statement. This meant that medical personnel opined that staff motivation schemes are not clearly outlined in the public health sector.

On whether recruitment exercise of health workers was done on merit without interference from any quarter, study findings revealed that 2.4 percent of the respondents strongly agreed and 14.4 percent agreed with the statement. 11.1 percent of the respondents were neutral, 26.0 percent disagreed and 46.2 percent strongly disagreed with the statement. The mean response rating was 2.01 which was low thus indicating that most respondents disagreed with the statement. This implied that medical personnel opined that recruitment exercise of workers is not done on merit. Study findings on whether the health sector is prompt in remunerating health care workers revealed that 2.9 percent of the respondents strongly agreed and 15.9 percent agreed with the statement. 9.6 percent of the respondents were neutral, 28.8 percent disagreed and 42.8 percent strongly disagreed with the statement. The mean response rating was 2.07 which was low hence implying that respondents disagreed with the statement. This meant that the health sector is not prompt in remunerating health care workers. This could affect the

motivation and effectiveness of health care workers.

Findings of the study on whether the health sector ensures timely promotion of health care workers revealed that 1.0 percent of the respondents strongly agreed and 9.6 percent agreed with the statement. 8.2 percent of the respondents were neutral, 31.3 percent disagreed and 50.0 percent strongly disagreed with the statement. The mean response rating was 1.80 which was low thus indicating that respondents disagreed with the statement. This implied that the health sector does not ensure timely promotion of health care workers. This could affect the morale of health care personnel hence negatively affecting their effectiveness. On whether the human resource department employs relevant strategies to recruit and retain qualified staff, study findings revealed that 2.4 percent of the respondents strongly agreed and 20.2 percent agreed with the statement. 15.9 percent of the respondents were neutral, 27.4 percent agreed and 34.1 percent strongly disagreed with the statement. The mean response rating was 2.29 which meant respondents disagreed with the statement. This implied that the human resource department did not employ relevant strategies to recruit and retain qualified staff.

Study findings on whether the staff in the health sector is subjected to fair treatment indicated that, 1.4 percent of the respondents strongly agreed and 20.7 percent agreed with the statement. 11.5 of the respondents were neutral, 31.3 percent disagreed and 35.1 percent strongly disagreed with the statement. The mean response rating was 2.22 which indicated that respondents disagreed with the statement. This meant that health care providers opined that the staff in the health sector was not subjected to fair treatment. Study findings on whether the human resource department had integrated ICT services to enhance service delivery in the health sector revealed that 2.4 of the respondents strongly agreed and 18.8 percent agreed with the statement. 15.4 percent of the respondents were neutral, 25.5 percent disagreed and 38.0 percent strongly disagreed with the statement. The mean response rating was 2.22 which was low hence implying that respondents disagreed with the statement. This meant that the human resource department in the health sector has not integrated ICT services in its service delivery.

The overall mean response rating on implementation of devolved human resource structure was 2.06. The mean was low implying that devolved human resource structure has not been fully implemented in public health facilities. Similarly, findings on the open ended items revealed that implementation of devolved human resources structure was hampered by factors such as inadequate staff, inadequate training and lack of staff promotion. This remains an area of grave concern. Study findings were in consensus with those of Wanzala and Oloo (2019) who reported that the health sector in Kenya was still struggling because it had inadequate human resource. Similarly, the findings of the study were in tandem with those of Aloo (2017) who reported that there was acute shortage of medical personnel in the County government of Kisumu.

4.4.1 Linearity test between devolved human resource structure and service delivery

The study sought to explain whether the relationship between devolved fiscal resources structure and service delivery was linear or not. In order to test for linearity between the variables, an F-test was performed at 95% confidence level. The null hypothesis that the relationship between devolved human resources structure and service delivery is not linear was tested. In order to explain the relationship, an F-test was done at 11 degrees of freedom between groups and 62 degrees of freedom within groups. Findings were as illustrated in Table 4.4. Table 4.4: Linearity test between human resource and service delivery

			Sum of Squares	Df	Mean Square	F	Sig.
Service delivery *	Between Groups	(Combined)	3148.434	11	286.221	6.461	.000
		Linearity	2651.076	1	2651.076	59.845	.000
Human resource	Within Groups	Deviation from Linearity	497.358	10	49.736	1.123	.360
			2746.553	62	44.299		
Total			5894.986	73			

Study findings showed that the p-value for deviation from linearity (0.360) was greater than significant value (0.05). This led to rejection of the null hypothesis that the relationship between devolved human resources structure and service delivery is not linear. The study therefore concluded that the relationship between devolved human resources structure and service delivery was linear. The relationship between the variables therefore met one of the assumptions of parametric tests such as regression.

4.4.2 Relationship between implementation of devolved human resource structure and service delivery in the health sector

The study sought to establish the relationship between implementation of devolved human resource structure and service delivery in the health sector. In order to establish the relationship between implementation of devolved human resource structure and service delivery in the health sector, a parametric Pearson correlation test was carried out. The study tested the null hypothesis that there is no significant relationship between implementation of devolved human resource structure and service delivery in the public health sector of the County Government of Trans Nzoia, Kenya. Findings were as illustrated in Table 4.5.

Table 4.5: Correlation between implementation of devolved human resource structure and service delivery in the health sector

Variable	Human resources
Health service delivery	r=0.671 p<0.001

Findings indicated that P-value (0.001) was statistically significant since it was less than 0.005 needed to reject the null hypothesis. The study therefore rejected the null hypothesis that there is no significant relationship between implementation of devolved human resource structure and service delivery in the public health sector of the County Government of Trans Nzoia, Kenya. This led to a conclusion that there is a significant relationship between implementation of devolved human resource structure and service delivery in the health sector.

4.4.3 Regression analysis between implementation of devolved human resource structure and service delivery

To establish whether implementation of devolved human resource structure was a major factor in the service delivery in the health sector, regression analysis was performed. Results were as illustrated in Table 4.6

Table 4.6: Model summary - devolved human resource structure and service delivery

R	R Square	Adjusted R Square	Std. Error of the Estimate
.671a	.450	.442	6.71225

a. Predictors: (Constant), Human resource

The R Square value was .450, which indicated that 45% of the variance in the service delivery is explained by the human resources in the current study.

Table 4.7: Regression model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	-9.595	4.812		-1.994	.050	-19.188	-.002
Fiscal Resources	2.607	.199	.839	13.103	.000	2.211	3.004

a. Dependent Variable: Service delivery

The p-value in the model is significant (p<0.001). This implies that implementation of devolved human resources structure is a predictor of service delivery in the health sector. This implies that implementation of devolved human resource structure is a significant predictor of service delivery in the health sector. Findings of the study agreed with the findings of Ngugi (2017) who pointed out that there is critical shortage of health workforce in Baringo County. The study further established that shortage of health work force is not enough and also lacks adequate training to meet the needs on the labour market. The study pointed out that Capacity building initiatives in the health sector have largely been characterized by inadequate or lack of needs assessment largely because they have been initiated by private partners.

4.5 Conclusions

The findings confirm that there is a statistically significant influence of devolved financial governance structure on service delivery in the health sector in Kenya. The study concluded that devolution of the financial governance structure was statistically significant in explaining service delivery in health sector in Kenya.

4.6 Recommendations.

The study recommended that county governments in Kenya should ensure adequate staffing and equipping of health facilities to enhance service delivery. Both the medical and support staff should be trained, compensated and equipped appropriately for designated roles. The motivation and disciplinary mechanism should be left to a certain level and be devolved. The study recommended a policy on capacity building and training. The curricular should focus on change management in order to equip the staff with adequate and current skills in human resource management.

The study also recommended a policy be established on recruitment, also from the private sector, and capacity building and training, including change management. The curricular should focus on change management in order to equip the staff with adequate and current skills in human resource management. A new policy framework to guide promotion of health workforce should also be instituted. There should be incentives for workers who go an extra mile. There should also be a policy to guide coordination between public and private sector to improve service delivery in the health sector.

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