# IMPLEMENTATION OF DEVOLUTION OF HEALTHCARE SYSTEM: A QUALITY PERSPECTIVE IN SELECTED PUBLIC HOSPITALS IN GARISSA COUNTY, KENYA

**Rahima Yussuf Buro**
School of Medicine, Kenyatta University, Kenya

**Dr. Andrea Yitambe**
School of Medicine, Kenyatta University, Kenya

**Dr. Kenneth Rucha**
School of Medicine, Kenyatta University, Kenya



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## ABSTRACT

Devolution is delegation of power, governance and resources from centralized government to local/subnational level jurisdictions. The Kenyan constitution allows two levels of government i.e. the national and county levels with each level having its mandate. Provision of standard and sustainable health services to the Kenyan citizens is one of the fundamental roles of devolution as stated in the Kenyan Constitution. This study examined the quality of healthcare services delivered before and after devolution in selected public health facilities in Garissa County as perceived by the healthcare users. The study employed cross-sectional descriptive research design to explore the rating of performance of the health care system after the devolution. Two key domains employed were accessibility and availability of services and adequate and competent workforce. The sample size was 379 respondents representing clients attending outpatient services. Data was analyzed using SPSS software version 22. Qualitative data was analyzed using thematic content analysis. Descriptive statistics was analyzed using frequencies and percentages and inferential statistics was analyzed using Chi-square and Fisher's exact test to test for associations between variables. $P<0.05$ was considered significant. The study revealed that majority of the respondents were female (51.3%), had no formal education (47.6%), and were unemployed (57.6%). The mean age of the respondents was 33.49 years. The average time taken to reach the nearest health facility was 2.1 hours and average waiting time before service was 2.6 hours. Majority of the respondents 75.9% felt that there was a decline in healthcare service delivery and majority 56% said there was shortage of staff with devolution. The study established that majority of the respondents 52.1% missed services due to absence or shortage of staff during their last hospital visit. The study showed a significant association between perception of improvement of service delivery and level of health facility visited (Fisher's exact test=21.342; p=0.001); and respondents missed service due to absence or shortage of staff and level of health facility visited ($\chi 2=8.779$; df=3; p=0.032). The study concludes that healthcare services have declined substantially with the introduction of devolution of healthcare services.


Key words: **Access to care, Devolution, Essential drugs, Equity, Quality of care, Health, Governance.**

## INTRODUCTION

Basically, devolution is delegation of power, governance and resources from centralized government to local/subnational level (Muia, 2008). The jurisdiction and powers that may be devolved may range from authority over such areas as health and the regulation of resources (Fox & Stephene, 2012). When government is devolved, all authority for decision-making is transferred to the county /local government (World Bank, 2012). Globally, the health sector is facing many challenges in maintaining and sustaining successful devolution. In majority of countries with devolution, most responsibilities of service a delivery are transferred to the

county or local government that elect their own leaders and generate their own resources and make their independent decisions.

In Africa, the health sector is undergoing major policy, system, and infrastructural changes. Devolution played a great role in Ghana since independence and there was much improvement in delivery of health services to local community (WHO, 2014). This led to improvement of health and reduction of mortality rates. In 1993, the improvement could not last due to inability to sustained devolution and hence limited the activities to public health section only (WHO, 2014). In Ethiopia decentralization has been implemented since 1996 where it started at the regional level and then at the district level in 2002 (Saharty et al., 2009). Despite experiencing good progress at the Regional level, it failed terribly at the District level where the targeted poor reside. The failure was due to lack enough resources to fully implement the government strategy.

Before promulgation of the new constitution, Kenya had a centralized government where all the activities were coordinated from a central place, i.e. from Nairobi, the country's capital City. Due to this, the country was mired with inequality in sharing of resources and poor allocation of resources. After the promulgation of the new constitution, citizens have had higher expectations since the new constitution clearly states the fundamental rights of the citizens including access to quality healthcare, clean water and proper sanitation. (KHSSIP, 2013-2017). Despite devolution of healthcare to the counties, majority of the citizens in the 47 counties, including Garissa County, are unable to access quality healthcare.

## Statement of research problem

Devolution of healthcare in Kenya started after the implementation of new constitution which promulgated in 2010. Despite devolution of healthcare much has not been done to improve the healthcare service delivery to the citizens and the impact of devolution of healthcare in Kenya has not been measured (Nyamu & Mwamuye, 2014). In marginalized areas like Garissa County, devolution of healthcare has not improved the indicators for successful devolution like resources mobilization and better referral functions (Government of Kenya, 2014). In addition, health affairs at the county level have been poorly managed and protected. Easy access to health services and equal distribution of national and county resources has not been ensured as required by the Ministry of Health (2014). This study, therefore seeks to examine the status of quality of healthcare after devolution within the public hospitals in Garissa County, Kenya. This was evaluated based on adequacy of health facilities, work force, performance levels, supply of essential drugs and accountability and good governance

## Research objectives

The main objective of the study was to assess respondent's perception on quality healthcare provision in selected public health facilities after devolution in Garissa County

The study was guided by the following specific objectives:

To find out the effect of devolution on equity of healthcare distribution in selected public hospitals in Garissa County;

To find out the effect of health care devolution on adequacy of workforce in selected public hospitals in Garissa County.

## Conceptual framework

Conceptual framework is analytical tool used to organize idea and plan to ease the process of the study. It shows how study variables are related as shown below.

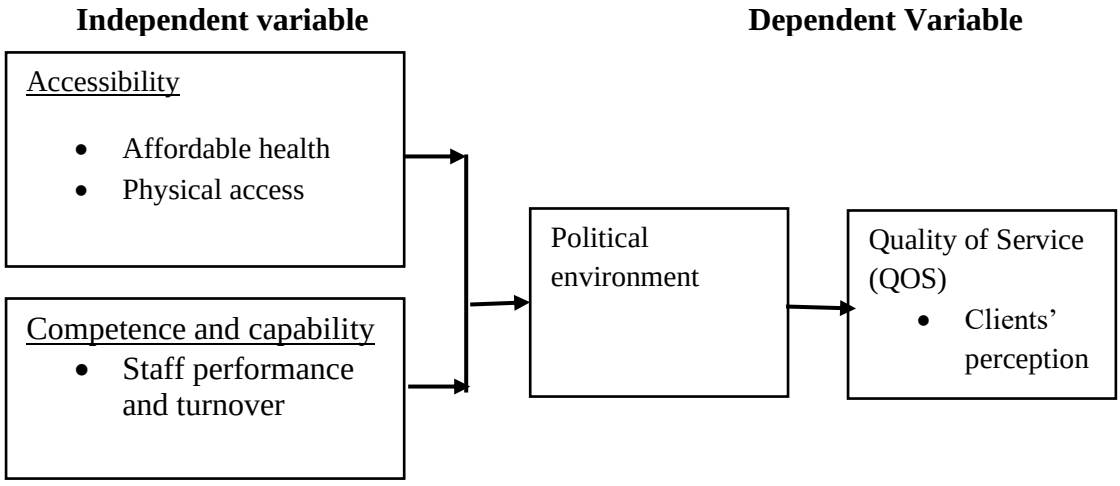


**Figure 1: Conceptual Framework**
**Source:** ***Adapted from Kenya Health policy framework (KHPF) 2014-2030***

## LITERATURE REVIEW

### Introduction

This chapter analyzed and reviewed the past working papers, journals, books, reports, periodicals and internet sources after which research gaps are discussed

### Devolution of Healthcare Services

Devolution is delegation of power and government resources from national level to County/local jurisdictions. Devolution may bring improvement in public service if there is equal distribution of resources including finance, human and material resources (Muia, 2008; Musgrave, 1959 and Oates, 1972). They further stated that county government was closer to the poor than the national government hence improvement of healthcare accessibility.

The global trend of countries transitioning from centralization to devolution of power and functions has been recorded by various authors. According to Agrawal & Ribot (2010), many countries in the world are practicing devolved system of government to improve leadership and governance which is the replacement of centralized way of governing. The centralized government is characterized with poor leadership, poor accountability and low community participation in governance.

Devolution in Bolivia was carried out through the law of popular participation (LLP). The genesis for passing this law in 1994 was for the push of democratization and the poor performance of the Bolivian economy (Centellas, 2000). Devolution in Bolivia dramatically reshaped the political, economic and social reality of the country yielding improved equal sharing resources through increases government funding but this did not improve the healthcare utilization (Collins & Green, 2006). Devolution of health in Bolivia led neglect of the disease control programme leading to national wide outbreak of infectious diseases like yellow fever. Studies from India and the UK have shown ample evidence of a positive impact in the process of public ownership, accountability and participation

Ethiopia decentralization took place since 1996 where the it started in the regional level and then to the district level in 2002 (Saharty et al., 2009). Despite experiencing good progress in Regional level in initial stages, it terribly failed in District level where the targeted poor reside. The failure was due to lack enough resources to fully implement the government strategy. Before the new constitution, Kenya had a centralized government where all the activities were coordinated from central place, that being the country capital. Due to this, the country was mired with inequality in sharing of resources and poor allocation of resources. After the introduction of the new constitution, the Citizen had higher expectations in since the new constitution clearly states the fundamental rights of the citizens including access to high standard healthcare, clean water and standard sanitation (KHSSIP, 2013-2017).

Despite the devolution of the health care sector to the county governments, majority of the citizens in the 47 counties are unable to access healthcare for all may be due to lack funds, poor governance, inequitable resources, understaffed facilities and incompetent workforce. In marginal are like Garissa county, devolution of healthcare has not improved the indicators for successful devolution like resources mobilization and better referral functions (Government of Kenya, 2012). In addition, health affairs of the county communities have been poorly managed and protected. Easy access to health services and equal distribution of national government and county healthcare resources have not been ensured as required by the Ministry of Health (2014).

Kenya health system has centralized since independence and before the new constitution with the decision make from top to bottom. The role of the central government is provision of working policies, allocation of national resources, overseeing the activities of the county government and coordination other programmes relating to health (Kenya Health policy, 2012-2030). They also dealt with monitoring of all activities relating to health. After the devolution, most of the health activities have been devolved to the county government and any success or failure is attributed to the county health leaderships.

Through various health strategic plan / framework, the ministry is committed to facilitate good governance in decision making, fair distribution of resources and healthcare facilities management. This is done through regular visits by the Health management Team and supportive supervision. Ministry of Health established the Health managements Board with the intension of bringing services close to the people and enhancing equitable distribution of resource (Wamai, 2013). After, the implementation of the new constitution, the Management

of health system into sections of government. The national and county government where by the national government deals with policy development and referral matters while County government carries the major burden of managing county health system, health promotion and disease prevention, procuring drugs and other consumables, and intracounty referral services, and many others. Mwamuye and Nyamu (2014) states that the failure of devolution comes as results of unequal distribution of national resources, poor distribution of health facilities and uneven inter-county development whereby even before devolution some counties were better developed than others.

### Health Workforce

Globally, there has been a need for decentralization of the health workforce with the intent of improving the general healthcare delivery performances. Some of the countries that devolved the human resource function include the Philippines and Uganda. For any healthcare to provide quality services, there must a competent and enough number of care providers (Mills, 2011). Bossert & Beauvias (2002) argues for better management of Human Resource, there should be effective and efficient system in place. The constitution of Kenya gives mandate to the county government to recruit, retain, fire their human resources as stipulated in the constitution. The County governments have a public Service board whose mandate is the management of Human resources in the county including health system. This marked the major reforms in the country devolved health sector.

The major challenges faced by the health sector in achieving millennium Development Goals is lack of competent and enough workforce (Mshelia et al., 2013). The WHO recommends that in every 100, 000 populations there should be 356 nurses and 36 doctors (Health Sector Report, 2013). In Kenya this is far way below the required number of doctors and nurses in a given population

## MATERIALS AND METHODS

### Research Design

A descriptive cross-sectional study design was used to investigate the devolution of healthcare; a quality perspective in selected public Hospitals Garissa County, Kenya. The study was a cross-cutting covering the whole county health facility on quality of healthcare.

### Study location

The study was conducted in Garissa County, Kenya. Garissa County is situated in North Eastern Region of Kenya. It rises from a low altitude of 20m to 400m above sea level. The major physical features are seasonal wells and the Tana River Basin on the western side of the county. Garissa County has six sub-counties which include: Fafi, Garissa, Ijara, Lagdera Balambala and Daadab. These correspond to constituencies in the county (CGG, 2018).

## Study Population

The study population comprised of clients attending outpatient services in the Garissa County public healthcare facilities. Including men and women aged 18-49 years. Clients below 18yrs and those above 49 years were not included.

## Sample Size Determination

The size of the sample was computed using the proportionate sampling method whereby this was used to achieve the number of participants from each strata in different level of hospitals. Therefore, the appropriate sample size for this research is based on below formula.

$$\boldsymbol{n} = \frac{\boldsymbol{Nt^2 \cdot p \cdot q}}{\boldsymbol{d^2 N + t^2 \cdot p \cdot q}}$$

Where

N=total population size (34875),

n- desired sample size,

p =probability of selecting a respondent from the sample which is 0.5,

q = (1-p) probability of not selecting a respondent from the sample which is 1-p =0.5,

t =standard normal deviation usually at 1.96 and

d= the degree of accuracy required = 0.05. In this case 95% confidence level has 5% error or 0.05 errors, therefore 0.05 is the level of significance.

$$n = \frac{34875x\ 1.96^2 \cdot 0.5 \cdot 0.5}{0.05^2 x\ 34875 + 1.96^2 \cdot 0.5 \cdot 0.5}$$

n=379

The approach that was used to determine the sample size for patients in each sampled hospital is proportionate sampling method where the sample size of each level of hospital is proportionate to the population size of the subgroup/stratum as below:

Selected sample size in each hospital= Population size in the selected hosp (N) x sample size
Total population size (N)

For example, Garissa County Referral Hospital (GCRH)

Selected sample size in each hospital= 16500 x 368 =174
34875

## Sampling Technique

For quantitative data, public hospitals were stratified according to the levels of hospitals that creates three strata (that is level 5, level 4, level 3 hospitals and level 2) with outpatient

department in Garissa County which are homogenous, mutually exclusive and every hospital was assigned to only one stratum (sub-group). Garissa County has 1 (one) level 5, 7 level 4, 25 level 3 and 45 level 2 health facilities. A complete list of all the Public hospitals was made and a unique number assigned to each of them. A set of finally, systematic sampling was then used to select the respondents from each hospital. Every 5th of the clients was interviewed. In addition, one key Informant Interviewer was included from each facility. Through proportionate allocation the questionnaires were then distributed among the facilities. The table below shows in sampling framework;

Table 1: Sample Size

| **Level** | **Hospitals /health centre/ dispensaries** | **Average No. of OPD quarterly** | **Sample size** |
|---|---|---|---|
| Level 5 | Garissa county referral hospital | 16500 | 179 |
| Level 4 | Ijara district hospital | 10,425 | 113 |
| Level 3 | Medina health centre | 4500 | 49 |
| Level 2 | Alfaruq dispensary | 3450 | 38 |
| | **Total av.OPD** | **34,875** | **379** |

## Data Collection Methods

Structured questionnaires were used to collect data. In quantitative method the main research instrument to be used was interview schedule for primary respondent and structured questionnaires for facilities managers. In-depth interview guide was employed as the main qualitative method during data collection.

## Pilot Study

A pilot study was conducted at a neighboring public health facility that was not part of the study. A total of five respondents participated in this preliminary study. The pilot study helped identify the weaknesses of the research instruments by determining their reliability and validity.

## Validity and Reliability

The extent to which a research data collection tool can measure accurately with minimal bias is called validity. Validity is concerned with whether the research tools actually elicit the intended information from the respondents. Validity helped the determine whether the instruments yielded the intended results.

Reliability is concerned with the consistency in which certain items measure the same contrast (Gwamaka, 2012). Reliability decreases random error (Mugenda & Mugenda, 2003). The research assistants were selected and trained on data collection tools and pre-testing of tools was conducted to evaluate the respondents' understanding of the items in the research tools. The questions which were ambiguous were corrected for better understanding of the respondents to ensure the reliability of the research outcome. To test the reliability of the research tools a Cronbach's alpha was used.

As advised by Sekaran (2013), coefficients which are less than 0.6 are considered poor, coefficients between 0.6 and 0.8 are considered acceptable while coefficients greater than 0.8 are considered good. Cronbach alpha was found to be 0.76.

### Data Management, Analysis and Presentation

In the course of this research, data checking, cleaning and editing of questionnaires was done simultaneously during data collection to make sure that there is completeness and consistency before analysis. Data was then transcribed, coded and labeled in order to conduct content analysis and draw conclusions. The study utilized SPSS software version 22 to compile and analyze data. Data was then presented in form of tables through frequencies and percentages. To determine relationships between independent and dependent variables, this study used Chi-Square tests calculated at 95% confidence interval with a margin of error of 0.05. It is appropriate since both variables used in the study were measured at nominal and categorical levels. Boshoff et al., (2003) recommends analyzing data from the Key Informants through examination of patterns and trends of responses to generate themes. In this study, qualitative data was analyzed using content analysis based on arising themes.

## REASEARCH FINDINGS

### Introduction

This chapter presents the results of analysis of the responses obtained from respondents who attended selected public health facilities in Garissa County. The results are presented in respect to the objectives of the study.

### Effect of devolution on equity of healthcare distribution

### Effect of devolution on improvement in healthcare service delivery

The study sought to find out the effect of devolution on improvement in healthcare service delivery. Majority of the respondents 290(75.9%) felt that there was decline in healthcare service delivery with devolution; 76(19.9%) felt there was improvement; and 16(4.2%) were not sure (Figure 2).

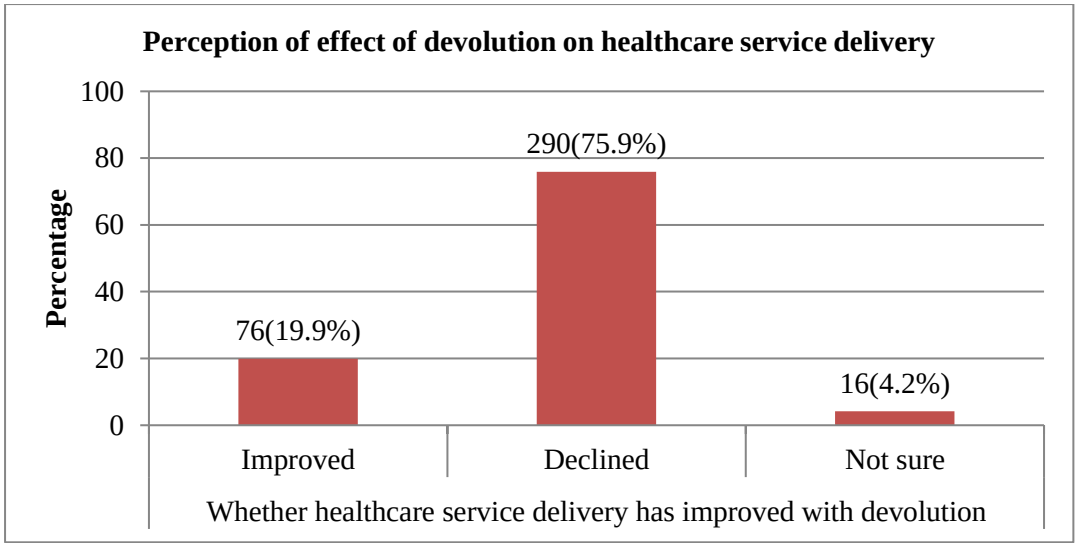


***Figure 4.1: Perception of effect of devolution on healthcare service delivery***
Effect of devolution on healthcare service delivery at selected health facilities

The study indicates that majority of the respondents who perceived an improvement in service delivery after devolution 22(28.9%) were those who had visited Afraruq dispensary (Level 2) while those who perceived least improvement 16(21.1%) were those who had visited Ijara Sub-district hospital. Majority of the respondents who perceived a decline in healthcare service delivery after devolution 81(27.9%) were those who had visited Afraruq dispensary (Level 2).

There was a statistical significant relationship between perception on improvement of service delivery and the level of health facility visited (Fisher's exact test=21.342; p=0.001).

**Table 2: Respondents' perception of effect of devolution on healthcare service delivery**

| **Perception on Improvement of service delivery** | **Name/level of health facility visited** | | | | **Significance** |
|---|---|---|---|---|---|
| | Garissa Referral Hospital Level 5 | Ijara Sub-district Hospital (ISH) Level 4 | Medina Health Centre Level 3 | Afraruq Dispensary Level 2 | |
| Improved | 17(22.4) | 16(21.1) | 21(27.6) | 22(28.9) | Fisher's exact test=21.342; p=0.001 |
| Declined | 72(24.8) | 75(25.9) | 62(21.4) | 81(27.9) | |
| Not sure | 3(18.8) | 0(0) | 0(0) | 13(81.3) | |

**The figures in parenthesis represent the percentages (%)**

**Effect of health care devolution on adequacy of workforce in selected public hospitals in Garissa County**

Whether respondents missed service due to absence or shortage of staff in the hospital

Majority of the respondents 199(52.1%) indicated that they missed service due to absence or shortage of staff during their last hospital visit (Figure 3).

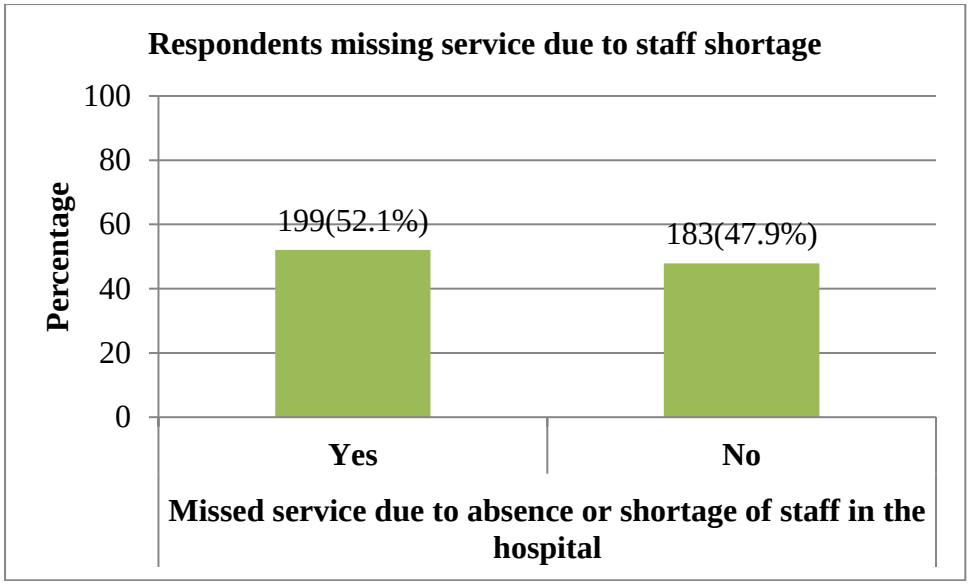


**Figure 3: Status of missed service due to absence/shortage of staff**

**Association between respondents missing service due to absence or shortage of staff and level/name of health facility**

Majority of the respondents who indicated that they missed service during their last hospital visit 55(27.6%) were those who attended Medina health centre (level 3 health facility); whereas the least 44(22.1%) were those who had visited Ijara Sub-district hospital (level 4 health facility). Majority of the respondents who indicated that they did not miss service during their last hospital visit 62(33.9%) were those who attended Afraruq dispensary (level 2 health facility); whereas the least 28(15.1%) were those who had visited Medina health centre (level 3 health facility) (Table 3).

There was a statistical significant difference between missing service due to absence or shortage of staff and the name/level of health facility visited last prior to the study ($\chi 2$ =8.779; df=3; p=0.032). This therefore means that the level of health facility visited was a determinant in respondents' missing service due to absence or shortage of staff.

**Table 3: Respondents missing service due to absence or shortage of staff**

| Missed service due to absence/shortage of staff | Name and level of health facility visited | | | | Significance |
|---|---|---|---|---|---|
| | Garissa Referral Hospital Level 5 | Ijara Sub-District Hospital (ISH) Level 4 | Medina Health Centre Level 3 | Afraruq Dispensary Level 2 | |
| Yes | 46(23.1) | 44(22.1) | 55(27.6) | 54(27.1) | $\chi 2$ =8.779; df=3; p=0.032 |
| No | 46(25.1) | 47(25.7) | 28(15.1) | 62(33.9) | |

***The figures in parenthesis represent the percentages (%)***

**Whether respondents perceive shortage of staff is worse after devolution**

Figure 4 indicates that majority of the respondents 214(56%) felt that shortage of staff is worse after devolution; whereas 168(44%) felt that it was not worse after devolution.

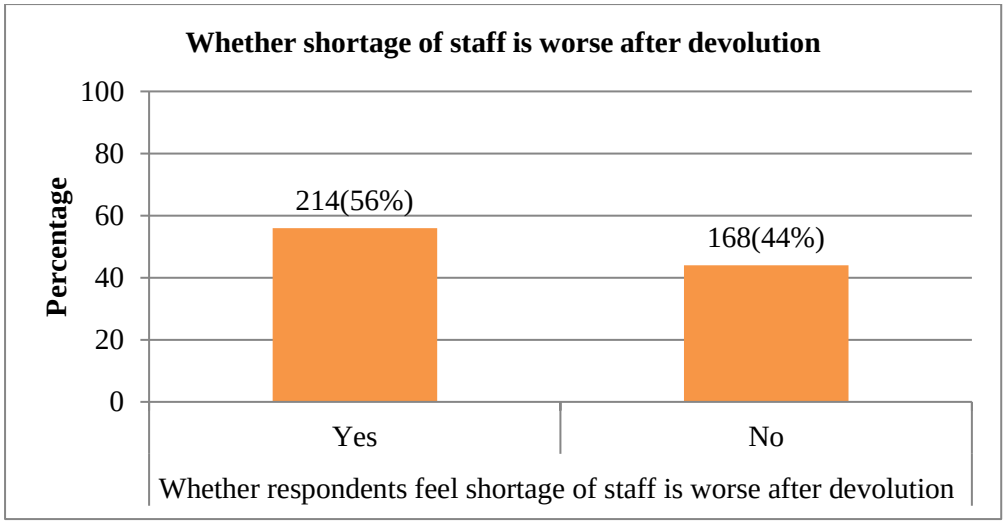


***Figure 4: Whether perception of shortage of staff is worse after devolution***

**Association between whether respondents felt shortage of staff is worse after devolution and level of health facility**

Majority of the respondents who felt that shortage of staff was worse after devolution 62(29%) were those who attended Afraruq dispensary (level 2 health facility); whereas the least 46(21.5%) were those who had visited Ijara Sub-district hospital (level 4 health facility). Majority of the respondents who had not felt that shortage of staff was worse after devolution 54(32.1%) were those who attended Afraruq dispensary (level 2 health facility); whereas the least 26(15.5%) were those who attended Medina health centre (level 3 health facility) (Table 4).

There was no statistical significant difference between perception of shortage of staff after devolution and the name/level of health facility visited last prior to the study ($\chi 2$ =7.096; df=3; p=0.069). This therefore means that the level of health facility visited was not a determinant in respondents' perception of shortage of staff being worse after devolution.

**Table 4: Whether shortage of staff is worse after devolution**

| Whether shortage of staff is worse after devolution | Name/level of health facility visited | | | | Significance |
|---|---|---|---|---|---|
| | Garissa Referral Hospital Level 5 | Ijara Sub-District Hospital (ISH) Level 4 | Medina Health Centre Level 3 | Afraruq Dispensary Level 2 | |
| Yes | 49(22.9) | 46(21.5) | 57(26.6) | 62(29) | $\chi 2$ =7.096; df=3; p=0.069 |
| No | 43(25.6) | 45(26.8) | 26(15.5) | 54(32.1) | |

***The figures in parenthesis represent the percentages (%)***

## DISCUSSION OF THE FINDINGS

Devolution was presumed to enhance healthcare distribution across the country. Tsofa et al. (2018) reported that county governments were not thoroughly prepared on the provision of healthcare services. This study found a decline in healthcare to be significantly higher after

devolution. Though other public hospitals were deemed to have had a little improvement, there was a general perception that the dispensaries services had declined. The decline was reported to be prevalent in dispensaries than in primary and secondary health facilities. Dispensaries are mainly within the villages and far away from the county headquarters. They thus do not enjoy the services such as immediate re-stoking, skilled workers, and good infrastructure, among others. The findings agree with Kimathi (2017) that deterioration of health services is notable in the devolved health sector. Devolution led to the segregation of some areas, particularly those that were far away from the capital city, which initially enjoyed better allocation of services. The same has however been replicated in counties where better services are found within the county's headquarters. Concentrating such services in one area means that the other regions are marginalized. Okech (2017), in his study, noted that the coordination between the government and other stakeholders such as county governments was poor.

For universal health care to be realized, the healthcare workforce is a factor that needs to be considered (Wanzala & Oloo, 2019). Kenya has a long way to go in the realization of UHC due to the inadequate number of healthcare personnel (Okech, 2017). The problem has further escalated after healthcare devolution was introduced in line with the 2010 constitution. Issues such as delay and disruptions in salary payments in addition to political interference have affected what was once thought to be a solution to healthcare issues in the country (Tsofa, Goodman, Gilson & Molyneux, 2017). This was confirmed by our study, which found out that staff shortage led to patients missing required services. Inadequate health personnel could be as a result of frequent strikes experienced in public hospitals, migration to other counties and resignations due to frustrations (Tsofa, 2017). Our study found out that more health care staff are concentrated in bigger public hospitals, and very few are in level 2 hospitals. Often bigger hospitals are within towns where other services and amenities are available. Smaller hospitals serve only the locals and for this reason may not be preferred by workers who want to get more exposure and enjoy town life.

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The study concludes that healthcare care services have declined substantially with the introduction of healthcare devolution. The effect is more significant in level 2 hospitals than it is in level 5 hospitals. The improvement of healthcare services depends with the proximity of the facility from the county headquarters. Generally, patients are not satisfied with the services provided by the public health facilities in the Garissa County. Thus, with or without devolution the services are below the expectation of the clients.

It can be concluded that public hospitals experience healthcare staff shortage. Patients often go unattended due to lack or shortage of health personnel. Issues such as delay and disruptions in salary payments in addition to political interference have affected what was once thought to be a solution to healthcare issues in the country. Inadequate health personnel could also be as a result of frequent strikes experienced in public hospitals, migration to other

counties and resignations due to frustrations. Bigger hospitals are often preferred by staff since they are within towns where other services and amenities are suitable.

## Recommendations of the Study

The study has come up with the following recommendations in view of the study findings:

The central government and the county government need to work together to ensure that services offered by public health facilities meet the WHO guidelines. County governments should therefore employ more healthcare personnel to enhance service delivery at the facilities.

More workers hailing from the county should be encouraged through incentives like proper housing and security to work within the county. This will encourage the new comers to settle in any area within the county thus improving the quality of health services.

The county government of Garissa should improve security in all areas of the county. One way of strengthening being formation of nyumba kumi that notices and reports cases of new entrants in their regions. This will be important in the retention of healthcare personnel.

## REFERENCES

Agrawal, A. & Ribot. J. (2010). *Accountability in Decentralization: A Framework with South* Asian and Africa Cases. The Journal of Development Areas, No 33 pp 437-502.

Bossert, T., & Beauvais, J. (2002). *Decentralization of Health Systems in Uganda, Zambia, Ghana, and The Philippines*: A comparative Analysis of Decision Space. *Journal of Health Policy and Planning*, 17, 314-324.

Centellas, M. (2000). *Decentralization and Democratization in Bolivia.* Miami.

Collins, A., & Green, H. (2006). Decentralization and Primary Health Care: Some negative effects in Developing Countries. *International Journal of Health Sciences*, Vol 234: 576-584.

Government of Kenya (2012). *Kenya Health Policy 2012-2030:* Ministry of Medical Services and Ministry of Public Health and Sanitation. Kenya School of Government. Working paper 4; 94500

Kenya Health Policy (2012-2030). *Devolution of Healthcare Services in Kenya:* Kenya Health Policy, 2012 - 2030.

KHSSIP (2012-2017). *Transforming health: Accelerating Attainment of Universal health coverage*. Ministry of Health, Afya House http://www.health.go.ke.

Kimathi, L. (2017). Challenges of the Devolved Health Sector in Kenya: Teething Problems or Systemic Contradictions? *Africa Development*, 42(1), pp. 55-77

Mills, A. (2011). *The Challenge of Health Sector Reforms: What Must Governments*

*Do?* London: Palgrave MacMillan.

Ministry of Health (2014). *Kenya Health Policy 2014–2030: Towards attaining the highest standard of health.* Ministry of Health, Afya House.

Ministry of Medical Services and Ministry of Public Health and Sanitation. (2012-2017). *Kenya Health Policy.* Nairobi: Government Press.

Mshelia, C., Huss, R., Mirzoev, T., Elsey, H., Baine, S. O., Aikins, M. Martineau, T (2013). Can Action Research Strengthen District Health Management and Improve Health Workforce Performance? A Research Protocol. *British Medical Journal*, 2013-003625.

Muia, D. (2008). *Devolution of Governance to Districts in Kenya: New Approaches.* Nairobi: University of Nairobi Press.

Musgrave, R. (1959). *The Theory of Public Finance: A Study in Public Economy.* New York: McGraw-Hill.

Mwamuye and Nyamu, (2014*). Devolution of health care system in Kenya*: *A strategic approach and its implementation in Mombasa County, Kenya*. International Journal of Advanced Research. Volume 2, Issue 4, 263-268.

Oates, W. (1972). *Fiscal Federalism.* New York: Harcourt Brace Jovanovich. 52

The World Bank, (2012). *World Bank Fiscal Decentralization Knowledge Programme Team*. *Devolution without Disruption: Pathways to a Successful New Kenya*.

Tsofa, B. et al. (2018). Early Experiences and Effects of Health Sector Devolution in Kenya. KEMRI

Tsofa, B., Goodman, C., Gilson, L., & Molyneux, S. (2017). Devolution and its effects on health workforce and commodities management - early implementation experiences in Kilifi County, Kenya. *International journal for equity in health*, *16*(1), 169. doi:10.1186/s12939-017-0663-2

Wamai, R (2013). *Reforming health systems: the role of NGOs in Decentralization. Lessons from Kenya and Ethiopia.* Boston: Harvard School of Public Health.

Wanzala, Maximila & Oloo, Micky. (2019). Role of Devolution In Health Service Delivery, Health Workforce and Medical Commodities Acquisition: A Review. 4. 497-509. 10.21276/sjm.2019.4.7.4.