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DEVOLUTION AND ITS INFLUENCE ON THE PROVISION OF HEALTHCARE SERVICES IN THARAKA NITHI COUNTY, KENYA.

BONIFACE MUNENE RUFO

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2019
DECLARATION

This research project is my original work and has never been submitted for examination in any other institution.

Signature…………………… Date……………………

BONIFACE MUNENE RUFO

Reg No: C50/5808/2017

This research project has been submitted for examination with my approval as the university supervisor.

Signature…………………… Date……………………

ALLAN KORONGO
DEDICATION

I wholeheartedly dedicate this work to my wife Samantha Mwendwa and parents Madam Jane Nkuru and Mr. Rufus Mutegi, for supporting me fully in my academic journey.
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ABBREVIATIONS AND ACRONYMS

ANC: African National Congress

CEC: County Executive Committee

K.M.P.D.U: Kenya Medical, Pharmacist and Dentist Union

NCAPD: National Coordination Agency for population and Development

NHIF: National Health Insurance Fund

NGO: Non-governmental Organization

SPSS: Statistical Package for Social sciences

US: United States

UK: United Kingdom

WHO: World Health Organization
ABSTRACT

The study examined devolution and its influence on the provision of healthcare services in Tharaka Nithi County. Health is a basic human right and this is emphasized in the sustainable development goals. A target population of 177 health workers was used. The sample size was 123 respondents. Both proportionate stratified random sampling and purposive sampling were used for main respondents and key informants respectively. Questionnaires were used to collect quantitative data while interview guides to collect qualitative data. Statistical Package for Social Science (SPSS) version 22 was used in data analysis. Pertaining to human resource, the study found out that the respondent’s salaries had increased and this motivated them to do their duties effectively hence boosting the healthcare services. Despite the increment, they termed it as inadequate. On the other hand, staffing in terms of the number of health workers had decreased, and this made each of them attend more than 101 patients a day. Majority of the respondents did not get a chance to improve their skills through training. There was a significant association between human resource capacity and the provision of healthcare services where P-value =0.000 and X² =105.517. On health financing: the financing of health services was not enough. Delay in the disbursement of funds affected the normal operations. Supply of drugs and medical equipment delayed due to funding untimely and this forced patients to seek services in other healthcare centers. Majority of the respondents did not access the financial reports of the facility, and those who managed were somehow satisfied. There was a significant association between health financing and the provision of healthcare services where P-value =0.000 and X² =161.092. The leadership and governance were better before devolution according to the respondents. The hospital leadership involved health workers through departmental heads in decision making. The most common ways of communicating to the staff were through an internal memo and office phone calls. Leadership and governance had a positive relationship with the provision of healthcare services where P-value =0.000 and X² =218.963. The process of procurement was not done better because many delays were experienced. Health workers, through their departmental heads, were involved in the procurement process before the purchase of critical things like drugs. Not all medications for main ailments were available since patients were forced to purchase some in chemists and private clinics. There was a statistically positive association between procurement and provision of healthcare services where P-value =0.000 and X² =200.031. The study concluded that devolution had a potential of improving the delivery of health care services both at the county and individual levels. The recommendations made include; county governments should employ more health workers and offer training to improve their skills. More sources of income are required other than depending only on the national government. Lastly, effective policies should be adopted to curb the issue of corruption in the procurement process; for instance; e-procurement could work better.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Good health is a fundamental human need, and this makes the provision of healthcare services to be a basic human right involving curative, promotive, preventive and rehabilitative care. Health has been considered as the main factor in the realization of sustainable development goals.

Through devolution, the county governments have powers to deliver effective health services by planning for resources, monitoring activities and coordination of health services (Omolo, Kantai & Wachira, 2010).

Globally, the devolution of healthcare services has been accepted as a way of enhancing the effectiveness and efficiency of the health system. Besides, different countries have various health care policies and practices in their context (Jongudomsuk & Srisasalux, 2012). In Thailand, decentralization of health care services could not be achieved appropriately without central government support. The staff working at the local government level were fully mentored, and their capacity strengthened by the central ministry staff with experience, to ensure they carry out their duties effectively (Jongudomsuk & Srisasalux, 2012).

Latin America health systems performance gives evidence that devolution does not necessarily provide suitable innovation, delivery of health services, effective accountability and community participation. This means that there has been a problem with devolved health services worldwide (Sandiford, 1999). The author continues to assert that in Mexico, Brazil and Bolivia, devolution did not show significant impacts in the health services despite central government allocating funds in all devolved units based on the number of people. People remained less healthy in impoverished regions, but the more prosperous states had more funds after topping up with their own collected revenues (Sandiford, 1999).

In the Philippines, local governments have been empowered through devolution. Decision making of health issues has been rapid and extensive. This has given other sectors like civil
society a chance to actively participate (Atienza, 2004). Cohen, Gabriel, & Terrell (2002) assert that healthcare workforce from diverse racial and ethnic groups are essential in the expansion of healthcare access, especially for the neglected communities.

In Africa, health systems have also been affected by health professionals migrating to well-paying countries in the west. Research shows that 1.3% of the world's health workforce attends individuals who face 25% of diseases globally. Most of the countries are developing, and they experience the problem of staffing in the health centers, which profoundly affect the delivery of health services. There is an average of 2.3 medicinal services specialists in Africa for each 1000 populace, and in America, there are 24.8 social insurance labourers for every 1000 people. This indicates that in Africa, there is a problem with medical staffing. 37% and 7% of South African doctors and nurses respectively have migrated to Australia, Canada, UK, U.S, France and Germany since 1996 (WHO, 2006).

Rural Mali has benefited through the devolution system. A study by Lodenstein and Dao (2011) indicates that since the implementation of devolution in primary healthcare, there have been opportunities on staffing, downward accountability and effective responsiveness.

In Kenya, devolution of healthcare is viewed as a good step towards achieving sustainable development goals and Kenya Vision 2030. The government aims at providing a high quality of health services by ensuring proper funds management with a focus on improving Kenyans livelihood (GoK, 2007). A research was done by Thuku and Wario (2014) reveals that local needs have been solved through increased responsiveness of health systems.

Devolution of health care services has brought many opportunities at the local levels for counties in Kenya. To have effective progress on this, counties have to be adequately equipped to be a hub for organizing services (Khaunya, Wawire & Chepng’eno (2015). The success of devolved health services highly depends on the enabling environment in Kenya with stakeholders showing their commitment (KPMG, 2014).
1.2 Statement of the Problem

The constitution has given the counties powers for self-governance and effective delivery of services. Since new county governments came into power in 2013, much has been expected to be achieved in terms of adequate health care service delivery. However, counties have tried but much more need to be done to ensure various gaps are filled to provide adequate healthcare services. World Health Organization recommends the doctor to the population ratio be 1:1000, but in Kenya, 1 doctor serves 1700 people. In Canada, the ratio is 2:1000 (WHO, 2016). In Kakamega and Kajiado counties, the ratio is 1:14,246 and 1:76,000, respectively (Chitere & Ngundo, 2015). Devolution of healthcare service is still in its early stages in Kenya and has been faced by numerous challenges. Therefore, studies the devolved healthcare services in Kenya are critical. Globally, research by Sandiford, (1999) indicates that in Mexico, Brazil and Bolivia, devolution did not show significant impacts in the health services despite central government allocating funds in all devolved units based on the number of people. People remained less healthy in impoverished regions, but the more prosperous states had more funds after topping up with their own collected revenues.

Locally, studies on healthcare devolution have been done, but none has so far been carried out in Chuka General Hospital and Tharaka Nithi County in general. A study done by Waithaka (2013) on health devolution in Kenya found that since the devolution of healthcare services was started, health staff unrest have been rampant and this has led to many deaths in public hospitals. A study on assessing county health systems readiness in Kenya, a case of Meru County by Barker, Mulaki, Mwai and Dutta (2014) showed that counties were less prepared to give appropriate healthcare services under the devolved system. Khaunya et al. (2015) researched on devolved governance in Kenya and revealed that counties were facing various challenges that affected their achievements. The national government was also found to delay devolving of funds. Mwiti (2015) did a study found out that free maternity services in Chuka General Hospital were not effectively implemented.
Human resource capacity, health financing, leadership and governance, and procurement are critical aspects of devolution that enhance the provision of healthcare services. Therefore, more empirical evidence of these aspects is required. No single study on devolution of health has been done in Tharaka-Nithi County and specifically Chuka General Hospital, which has been in the limelight for poor health services. In 2014, health workers went on strike because of the delay in salaries. In 2015, health workers in Chuka, Bungoma and Webuye had another strike due to lack of equipment and inadequate remuneration. The same happened in 2016 and 2017 since health workers were not given a personal number, pay slips and salary. Lastly, in 2019, there were threats for strike due to failure of implementing return to work formula. It is for these reasons that this study intended to fill the knowledge gap by finding out the influence of devolution on the provision of healthcare services in Tharaka-Nithi County, Kenya.

1.3 Research Questions
a) What is the human resource capacity on the provision of healthcare services?
b) What is the influence of health financing on the provision of healthcare services?
c) What is the extent in which leadership and governance influence the provision of healthcare services?
d) To what extent does the procurement influence the provision of healthcare services?

1.4 Objectives of the Study
1.4.1 General Objective
The general objective of this study was to assess devolution and its influence on the provision of healthcare services in Tharaka-Nithi County, Kenya.

1.4.2 Specific Objectives
a) To assess the human resource capacity on the provision of healthcare services
b) To find out the influence of health financing on the provision of healthcare services
c) To establish the extent to which leadership and governance influence the provision of healthcare services
d) To examine the extent to which procurement influences the provision of healthcare services
1.5 Significance of the Study
The policy-makers will use the findings of this study to improve the healthcare sector by developing policies appropriate to the service delivery. The findings of this study will educate the general public on the influence of devolution in healthcare delivery services. They will also be able to realize that the impacts of devolution and this will enlighten them more on matters to deal with devolution.

This study is an essential source of literature that will be used by academicians when doing research. Finally, it will provide information about devolution globally, in Africa and Kenya hence adding to the body of knowledge.

1.6 Scope and Limitation of the Study
The research was carried out in Chuka General Hospital, Tharaka Nithi County, by assessing devolution and its influence on the provision of healthcare services. The study was done in Chuka General Hospital because it is the biggest public facility in Tharaka-Nithi County. The key variables studied were human resources capacity, health financing, leadership and governance, and procurement. The research instruments used in the collection of primary data include the questionnaire and the interview guides. The study population comprised of doctors, clinical officers, and nurses.

1.7 Definition of Key Terms
**Devolution:** Entails power and functions transfer to devolved units

**Health financing:** The process of providing finances to health facilities

**Health Care Services:** The management of diseases through health workers in an effective system

**Health leadership and Governance:** An act of leading in a health system with a purpose of effective performance and saving lives

**Health human resource:** Trained health workers, such as doctors, clinical officers, and nurses

**Procurement of equipment:** The act of obtaining or getting medical equipment
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
The following are discussed in this section: past literature, research gaps, theoretical and conceptual frameworks.

2.2 Concept of Devolved Healthcare Services
The health sector is considered to be playing a significant function in the welfare of citizens in different nations (World Bank, 2012). A useful health framework reflects competent health care to people. How health care is given to individuals varies from country to country. To realize the sound health care system, substantial financing should be provided, motivated human resources, user database, and general coordination that ensure there are quality administration and availability of drugs (WHO, 2006).

The United Kingdom is considered as one of the best countries having effective and efficient health care services across the globe. The indicators used to measure this kind of performance include the healthy lives of people, efficiency and quality. The United Kingdom, among the seven industrialized nations, was ranked best in access to healthcare. The entrance of acre in the UK was measured using the duration of time people wait to get health services. It was noted that they remain for a short time. The United Kingdom governments spent much on healthcare insurances and administration as well as general improvement of health facilities. In this study, the Netherlands was ranked as the beat of all industrialized countries sampled (Commonwealth Fund Report, 2017)

A lot needs to be done on the health care system of Africa to realize sustainable development goals. To reassess healthcare systems in Africa requires looking at a wide range of challenges impeding its progress. Political and economic problems are critical in the measurement of this. Various healthcare reforms need to be done to introduce more achievable objectives in the continent. This has started to be witnessed in different countries in Africa, where social and health care protection is given. For instance, in Kenya, all form four students are covered for free through the National Insurance Fund. In
Ethiopia, the provision of primary care health services has been improved over the years (Economist Intelligence Unit, 2011).

In Kenya, the oversight for the healthcare system has been improved, and there is increased engagement in the design, implementation, and evaluation of health services. Hospital boards, committees, and chatters for health have been highly incorporated in the management of the health services, and this has enhanced accountability and efficiency to some extent. Korir (2010) did a study on the provision of health services and recommended that there was a need for the Kenya Ministry of Health to enhance efficiency by having a useful database that provides all inputs each hospital use and the outputs realized.

Devolved healthcare has four-tiered systems. Community health services are the lowest level, which encompasses community-based creation activities. In this case, a community unit needs to be established in every 5,000 population. The second level is primary care which emphasizes on need for dispensaries. In every population of 10,000, there should be a dispensary. The dispensary is described to be both physical and mobile facilities in some areas like arid and semi-arid. The same policy emphasizes that there is an expectation of having four deliveries per day and every health center to have 30,000 populations. Therefore, the target nationally is 4,404 dispensaries and 1,468 health centers (Ministry of Health, 2013).

The county referral services are the third level as per the policy. This consists of all hospitals managed by the county governments. Four hundred forty county-level primary hospitals are the estimate so that the devolution of health can be actualized (Ministry of Health, 2013). Lastly, the national referral service is the fourth and highest level in the health sector policy. Secondary and tertiary referral facilities are included in this level. Approximate of 1 million populations are supposed to be served by the secondary referral facilities, and it is the mandate for all levels of governments to manage such facilities. Finally, approximate 5 million people are expected to be served by the tertiary referral facilities that provide a high level of specialized services across the nation (Ministry of Health, 2013).
According to Omollo et al. (2010), county governments get freedom through the devolved system. However, devolution has its challenges concerning health systems such as financing, equity, and preparedness. To achieve effective and sustainable health care services, problems must be addressed.

There is a gap in the health care access in Kenya between the rural and urban communities, the poor and affluent populations. This kind of variation cut across the whole country, where people access various health facilities depending on their classes (Turin, 2010). As emphasized in the Sustainable Development Goals, health is essential in people's welfare, and Kenya's devolution system is timely (NCAPD, 2010).

2.3 Human Resource Capacity and Provision of Healthcare Services

Human resource is a critical function in the health system since a competent workforce is needed for effective health service delivery (Mills, 2011).

Globally, studies have revealed that the devolution of human resources has been aimed to improve overall healthcare delivery services. According to Rondinelli (2010), the Philippines and Uganda have devolved their health workforce and the local governments given the mandate to recruit and fire personnel. In the two counties, political influence has been affecting the health workers' benefits and salaries levels. The same is witnessed in Kenya (Constitution of Kenya, Article, 235). The devolution of human resources has resulted in several strikes by the health workers due to their unmet needs (KMPDU, 2013).

According to the South African Child Gauge (2006), the African National Congress (ANC) has been at the forefront in preventing inequalities in the health sector. There was an introduction of free health care in 1994 involving all children less than six years. In 2003, an extension was made for the scheme to benefit even children older than six years and others with cases of disability.

Sub-Saharan African countries face a challenge of scaling up their health services and fail to provide universal healthcare services due to enough health professionals who are also motivated. This problem needs attention, and the amicable way of solving it is by training
more health personnel and providing incentives. Therefore, providing an enabling environment is critical for improved health services (Mshelia, Huss, Mirzoev, Elsey, Baine, Aikins, Martineau, 2013).

Soila (2015) did a study on devolution and realized that no measures were taken to motivate the staff and meet their needs. The study results emphasized the importance for staff need assessment, payment of salaries to be timely, and giving of incentives to the health workers working in disadvantaged areas. Staff was also intimidated, and this affected their productivity.

Akacho (2014) did a study and 74% of the respondents said that understaffing was a primary challenge that affected proper delivery of services. There was an indication that health workers in public hospitals were overburdened; hence, no motivation for their services. The same findings were revealed by Wavomba and Sikolia (2015), who found out that the patient-medic ratio, was high hence hindering proper delivery of services.

Health sector report (2012), assert that 19 doctors and 173 nurses served 100,000 populations. This is contrary to WHO, which recommends 36 doctors and 356 nurses. There was an establishment of 59,667 staff as of 2102, but 49,096 positions get occupied hence leaving a shortage of 10,371.

Miriti (2016) did a study on the influence of devolution and found out from 90.7% of the respondents that Meru Level five Hospitals had a challenging of staffing. There was a problem with the doctor-patient ratio, competency of health workers, and poor remuneration.

A study by Nyongesa, Onyango, and Kakai (2014) on clients' satisfaction in the maternity revealed that labor wards were understaffed. Doctors and nurses were few, and this made mothers delivering to struggle, and some give birth to dead babies. One nurse was in charge of many patients in the maternity wards; hence could not effectively serve everyone. These findings have been supported by Mwiti's (2015) study where it was found out that the number of patients increased, and health workers forced to work overtime due to shortage
issues. Some respondents thought that for the last two years, they had not taken any training for skills improvement.

According to Kariuki (2014), the current strikes in the health sector have primarily been contributed by the inadequate health workforce in the Kenyan counties. More than 22 counties experienced health personnel strikes between January and August 2015. The author continues to argue that health personnel unrest had been influenced by the high rate of corruption in the country, lack of funds at the county levels to employ health staff, and inappropriate structures in the national and county levels. Magokha (2015) asserts that the health sector faces the challenge of brain drain, which results in 30%-40%, which estimates to 600 doctors of the graduate annually move to other countries for better jobs.

One thousand one hundred eighty-seven medical engineering technologists are required, but there are only 169 available. Three hundred gynecologists are expected to be operating in public hospitals, but 73 are available. The high number of Kenyans uses the lower public facilities since they cannot access the highest-ranked public hospitals with specialists. Generally, general practitioners and other health workers in Kenya are less compared to the demand, which is rising daily (Ministry of Health, 2013).

WHO (2006) argues that human resource departments are mandated to play the function of labor relations, selection of employees, recruitment, performance appraisal, compensation, and development. To have a sustainable and effective delivery system, motivated and competent health workers are required. Therefore, the county governments have to make sure that resources, including human, are distributed equally, and it is adequate. In this case, sufficient means of health workers having good attitudes, skills required good numbers, and high competency.

On the government health care facilities focusing on health care providers and support staff indicated that the shortage of the team at 62% resulted in improper cervical cancer screening. A study by Essendi, Johnson, Madise, Matthews, Falkingham, Bahaj, Blunden (2015) indicated that ward rounds in two health facilities located in Kitonyoni and Mwania sub-location were not well done due to insufficient staffing.
2.4 Health financing and Provision of Healthcare Services

The Philippines is one of the first countries to implement devolution, faced a challenge of financing after the breakdown of the management system in the years 1992 and 1997 (Grundy, Healy, Gorgolon and Sandig, 2003). All devolved units depend on the national governments for financing every financial year, and the funds are used for recurrent and development expenditure.

China is in the process of ensuring that its citizens receive social and health protection through integrated healthcare services. This strategy aims at providing that there is improved access to health services as well as reduces poverty caused by various illnesses. Gangolli, Duggal & Shukla (2005) assert that India has developed the health care system but still not able to meet the public demands.

The financing of county governments comes from the national governments. In Africa, specifically in Kenya, health financing depends much on out-of-pocket payments. African countries are constrained by inadequate funding to improve service delivery at county levels. According to the Abuja Declaration pledging, 53 African countries signed and agreed to give out their state budget worth 15% to health sector. To achieve this, it as somehow difficult and actually, some nations just reduced the amount they have been channeling to countries (WHO, 2010). The local government of Nigeria depends on their financing from health insurance (Olakunde, 2012).

In Kenya, a research by Akacho (2014) found out that about 51% of the responses shown that inadequate financing was a factor that affected the effective delivery of health services at county levels. Otieno and Macharia (2014) assert that there is a need to improve the budget allocation for the health sector by the government. Financial plans should be done to enhance support from donors to facilitate development. Oketch (2014) argues that health budgets are majorly funded through tax generated income and donor funding. It is, therefore, critical to enhancing equitable distribution in geographical. Some payments especially those from pockets can be kept at minimal levels when there is increased tax funding and used appropriately. This is key to the reduction of the barriers to financial access. In the 2014/2015 fiscal year, the Kenyan national government allocated at least
15% of the budget to the health. Taxation, employer schemes, out-of-pocket payments, NGOs, development partners, private health insurance, and NHIF have been critical sources for health financing in Kenya. The threat has been posed in access to healthcare due to the high spending of out-of-pocket funds (Oketch, 2014).

Soila (2015) did a study on the devolved health care and revealed that diversification of funding, timely budgeting, mechanisms for accountability, and policy guidelines on the utilization of funds was rated worse due to the introduction of devolution. A study by Miriti (2016) indicated that 69.8% of the respondents said that funding was not timely; 36.0% were neutral on the statement that devolved funds promoted access to drugs, facilities, and equipment.

Allocation of Tharaka-Nithi government equitable share of revenue raised nationally in the financial year 2018/2019

**Table 2.1: Equitable share**

<table>
<thead>
<tr>
<th>Allocation ratio</th>
<th>Equitable Share</th>
<th>Allocation ratio</th>
<th>Equitable Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column A</td>
<td>Column B</td>
<td>Column A</td>
<td>Column B</td>
</tr>
<tr>
<td>1.22</td>
<td>3,684,400,000</td>
<td>1.16</td>
<td>3,642,400,000</td>
</tr>
</tbody>
</table>

*Source: The county allocation bill (2018)*
### Table 2.2 Conditioning granting

<table>
<thead>
<tr>
<th></th>
<th>FY 2017/2018</th>
<th>FY 2018/2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total conditional grants from the national government revenue</td>
<td>396,766,501</td>
<td>200,000,000</td>
</tr>
<tr>
<td>Conditional grant leasing of medical equipment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: The county allocation bill (2018)

### Figure 2.1: Flow of Funds

![Illustrative Diagram of the Flow of Funds Through the County Health System](source)

Source: HPP, 2015 (adopted from SOTA Kenya Presentation)
2.5 Leadership and Governance and Provision of Healthcare Services

Leadership and governance involve management systems, planning and monitoring, coordination and regulatory frameworks of health services (Merson, Black & Mills. 2006). Leadership and governance is stewardship where the management ensures that organizational objectives are successfully achieved and critical players are guided appropriately through a shared vision.

To have adequate health care interventions in place, devolved units require a transparent chain of commands, effective policymaking and rules that reflect transparency. Stakeholders should be actively participating in matters related to county policy, and there should be open information. Integrity in governance must be enhanced for transparency and accountability (Berman & Bosset, 2010).

In a study done by McClelland & Boyatzis (1982) on competencies of managerial effectiveness, it was found out that technical competence, interpersonal skills and conceptual skills were necessary for the leadership and governance. Yukl (2013) asserts that leaders should exhibit behaviours of being task-oriented, external networking, relations and change-oriented. The author continues to give core personality traits that a leader should have, which are stress tolerances, high energy level, and personal integrity, low needs of affiliation and internal locus of control.

Transformational leadership was found to influence organization outcomes positively. Some of the organizations are yet to know how important this aspect is towards their performance. Effective governance can as well not be left for purposes of smooth achievement of objectives (Alloubani, Almatari and Almukhtar, 2014). Shipton, Armstrong, West & Dawson, (2008) argue that lower patients complain directly linked to ethical leadership, and this indicates customer satisfaction and quality services delivery.

The 2010 Kenyan constitution provides the county executive committee (CEC) with the mandate of coordinating matters to do with devolved health care services. The chief officer manages the county health services, and such recruitment is done by the county public
service board hence governor makes the final appointment as enshrined in the article 45 of the County Government Act (National Council for Law Reporting, 2010).

Wavomba & Sikolia (2015) study indicated that lack of participative management resulted in medical staff being demotivated and finally contributing to the lack of job satisfaction. Type of leadership in the organization influences healthcare service delivery. Lack of commitment by the health workers has been linked to poor leadership in organizations. The impact of this is the loss of lives in the health facilities (Kuria, Namusonge & Iravo, 2016).

Counties in Kenya that had proper planning and management of health facilities were considered to be ready. The management, in this case, involved some aspects such as human resources and financial management. This is contrary to those counties which had poor planning and management. This indicates that the counties with better planning and management could highly provide adequate health services (Barker et al.; 2014). A report by GoK (2016) indicates that the devolution of healthcare services is critical in the improvement of socioeconomic status for people. There is an increase in coverage, and areas that had not received effective health services for years could easily have proper access. Therefore, the report suggested further that this being an excellent opportunity for Kenyans; there is a need for strengthening the county health systems to provide excellent health to all.

A study by Akacho (2014) indicated that health service delivery was affected by the lack of proper management, as noted by 41% of the respondents. In the study done by Kuria et al.; (2016), leadership was found to influence the relationship between employees and leaders. The leaders and employees were not relating well. Omondi (2016) argues that health facilities lack qualified managers since most of them who manage are professional health workers such as physicians, nurses and clinicians. This was supported by a study done by Mwamuye & Nyamu (2014) who assert that management of hospitals in Mombasa was done by medical doctors who lacked the knowledge and skills of strategic management.
A study by Miriti (2016) revealed that 59.3% of the respondents indicated that the participatory or democratic style of leadership was provided in the Meru hospital. 43.0% moderately agreed that there was a provision of health visions and plans in the hospital. 40.7% highly rated that leadership influences healthcare service delivery. A study by Soila (2015) on devolution of health services revealed that there was significant deterioration of leadership and governance in the devolved structure. Issues like quality support supervision, effective communication, the definition of roles and infrastructural needs assessment were not well addressed.

2.5.1 Organogram in a Devolved Healthcare System
There is an organized hierarchy in the health care systems including the county administration and facility as indicated in Figure 2.2.

Figure 2.2: Hospital Organogram

Source: https://doi.org/10.1371/journal.pone.0182440.g001
2.6 Procurement and Provision of Healthcare Services

Procurement has been a critical weakness linked to delay and completely unavailability of drugs and equipment in devolved health centers. Medicines and medical equipment constitute a significant part of the budget for health. Lack of drugs in the public facilities has been witnessed over the decades, and the most significant challenge is the procurement which is linked to lack of monitoring, corruption and uncontrolled political interference (World Bank, 2005).

Argentina, Bolivia, Venezuela and Colombia have been experiencing high corruption in the public hospitals due to overpayment of supplies. Mismanagement of funds results in lack of purchasing hospital equipment. Public hospitals have been linked to corruption including stealing of drugs, funds, illegal payment of unnecessary products and services, excessive inputs payments and favoritism in job employment. In Argentina, Colombia and Venezuela, service contracts and procurement involved bribes. The theft was high in Bolivia, Costa Rica, Peru and Venezuela. In Bolivia and Argentina, doctors’ absenteeism and illegal payments for inputs was a big challenge (Di Tella & Savedoff, 2001).

In Nigeria, only 25% of the health facilities had a minimum package of equipment has recommended. In Ethiopia, 21% of pub facilities have autoclaves for sterilizing some medical equipment, and functional operating theatres were available in 46% of the facilities. Interview with officials and the public in Ghana revealed that 21% of the procurements in public hospitals involve corruption (World Bank, 2005).

A study done by Zedekiah (2007) revealed that corruption was high in the procurement of medical equipment in Kisumu East Sub-County. Weak procurement policies were identified to be within the devolved health system together with unqualified staff.

A procurement review report by the Kenya Medical Supplies Agency (2008) indicates that there has been no effective procurement plan for guidance when tendering and contracts are being made. Suppliers have been experiencing a challenging of not being paid, and this was a result of lack of pre-procurement planning. The report suggested the need to have proper documentation of all procurement processes.
Supply chain management is critical in ensuring that there is the right supply of hospital equipment at the right time with reasonable prices. Quality of care in the health facilities has been primarily affected by the lack of resources. Lack of equipment has given health professionals a hard time (Ellis & Hartley, 2009).

2.7 Theoretical Framework
The study was guided by human capital theory, contingency theory of leadership and people centered development perspective.

2.7.1 Human Capital Theory
Schultz (1961) proposed social capital theory. The theory states that investment in people through education and training is a critical means of production. Investing in people in an institution gives good returns. According to Becker (1993), schooling provides knowledge, skills and also is a way of analyzing problems. Therefore, through schooling, productivity is increased.

The assumption of this theory is that productive capacity can be improved through formal education. To have citizens and employees who are educated, there is need to invest in various forms of education and give them the access. The proponents of the theory consider the investment of human capital more worthwhile than physical capital (Woodhall, 1997).

The theory makes conclusions that more significant economic outputs are realized through the investment of human capital. Before, tangible physical assets like land and equipment were more valued since they contributed a lot to economic strength. Labour was also essential, but the investment of capital equipment gave a business value. Today, human capital theorists concur that health care and education are crucial aspects of human capital improvement, which also increase the economic outputs of a country (Becker, 1993). Oliveira and Holland (2007) assert that Becker does not consider the education and training that is informally structured. He has emphasized so much on the importance of formal training hence neglecting the role of informal learning. The employees in an organization can as well get knowledge and skills through learning from experience.
The theory is essential in this study because health personnel are critical in the realization of excellent performance in the health facilities. Therefore, they need more training and motivation for them to be productive. The more educated an individual, the less dependent on specific tasks. The theory is applied in the context of organizations, and Chuka General Hospital is a government organization under the ministry of health. The human capital theory has a close association with the study of human resource, which is one of the objectives of this study.

2.7.2 Contingency Theory of Leadership

Fred Edward Fiedler proposed this theory in 1958. It states that the effectiveness of the group majorly depends on the leader’s style and the situation demands. Fred believes that there is no one way of leading since various conditions call for different styles of leadership since environments are dynamic.

The theory is based on the argument that the leadership style that should be applied in a certain place of work highly depends on the task in place. To have sound performance, there is need to have these two aspects going hand in hand. In addition, the structure of the task, power of the leader and relationship between member and leader form the group-task dimensions (Fiedler, 1964). The task structure is the crucial second dimension which emphasizes on the clarity or ambiguity of the task. Lastly, a leader who possesses high power has chances of utilizing rewards and sanctions while a leader with low position power is usually restricted and lack influence (Fiedler, 1964). The contingency theory of leadership has applied in many studies. For instance, the results of the study by Hofman, Morgeson and Gerras (2003) shows that the style of leadership had a positive influence in the follower’s safety citizenship where there was a positive safety climate. In less favorable safety climates, the relationship was not effective with the followers, hence indicating that safety climate is contingent on ethical leadership and productive relationships. The study indicates how a situational variable moderates the effectiveness of the leadership, an idea brought out by the contingency theory.

The theory is essential in this study because it guides how health facilities management should practice excellent leadership skills and governance depending on demands. This
means that various situations require different leadership styles. The theory emphasizes the need for having an effective relation between leader and member and meeting out rewards and punishments. Health workers expect to be guided on the goals and objectives of the organization, and therefore, good leadership must prevail. Managers in the health care must be engaged in some critical functions like employees motivation, planning of goals, conflicts resolution, decision making and leading people. How they carry out the purposes mentioned usually affects the performance of the organizations they are leading. Therefore, by the use of a contingency approach, the managers can improve their effectiveness of healthcare management (Johnston, 2018).

2.7.3 People-centered Development Perspective

This proponent of this approach was Carl Rogers (1987-59). The focus of this perspective is enhancing a more participatory decision-making, making people independent in their own undertakings, improving their social welfare and social justice (Korten, 1990). The emphasis of this perspective is that programs managed by outside entities in the community may not be as sustainable as when operated by the people themselves. People centered development shun the neglecting of peoples capabilities and community based assets.

There is a need for development to positively contribute to the wellbeing of people termed as beneficiaries. Development should encourage bottom up approach contrary to top-down approach and more emphasize given in the provision of human basic needs. In this case, the development experts are not put off completely but should act as facilitators in the development process (Korten, 1990).

Devolution of health care services is a development avenue of enhancing people centered development at the grassroots levels. Therefore, this approach was important to this study because it emphasizes the need for participation especially in the decision making which was captured on the objective of leadership and governance. In this case, Chuka General Hospital health workers were deemed to be a community that required development at that level. According to Storey (1999), people would be me comfortable when there is democracy in regard to participation and partnerships.
2.8 Conceptual Framework

The conceptual framework shows the diagrammatic relationship between independent and dependent variables (Mugenda & Muganeda, 2003). In this study, the independent variables include human resource, financing, leadership and governance, and procurement. The dependent variable is the provision of healthcare services.

**Figure 2.3: Conceptual Framework**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
</tr>
</thead>
</table>
| **Human Resource Capacity** | • Salaries and rewards  
• Staffing  
• Working hours  
• Trainings |
| **Health Financing** | • Enough financing  
• Timely financing  
• Source of funds  
• Auditing and accountability |
| **Leadership and Governance** | • Communication  
• Consultations  
• Supervision  
• Roles and responsibilities |
| **Procurement** | • Policies and procedures  
• Nature of procurement  
• Level of involvement |
| **Provision of Healthcare Services** | • Quality  
• Accessibility |

**Source:** Researcher (2019)

2.9 Research Gaps

Zedekiah (2007) did a study on factors influencing provision of healthcare services in the devolved system of government in Kisumu East Sub County, Kenya. The study failed to
evaluate how financing influences the provision of healthcare services. Miriti (2016) researched the influence of devolution of government service delivery on the provision of healthcare. The study failed to evaluate if procurement influences the provision of healthcare services. Soila (2015) did a study on the evaluation of the effects of devolution of healthcare delivery in Nakuru County. The study failed to directly find out the opinion of health professionals like nurse, doctors and clinicians. Mwiti (2015) researched factors influencing the quality of free maternity services; a case of Chuka General Hospital. The study focused on factors like financing, human resource and healthcare infrastructure, leaving out procurement, leadership and governance which the current study addressed.

2.10 Summary of the Literature

Lack of adequate and well-motivated health workers affects the provision of devolved health services. Akacho (2014) did research and found out that 74% of the respondents said that understaffing was a primary challenge that affected proper delivery of services. All devolved units depend on the national governments for financing every financial year, and the funds are used for recurrent and development expenditure. Soila (2015) did a study and revealed that diversification of funding, timely budgeting, mechanisms for accountability, and policy guidelines on the utilization of funds were rated worse.

To have effective health care interventions in place, devolved units require a transparent chain of commands, effective policymaking and rules that reflect transparency. Omondi (2016) argues that health facilities lack qualified managers since most of them who manage are professional health workers such as physicians, nurses and clinicians. This was supported by a study done by Mwamuye &Nyamu (2014) who assert that management of hospitals in Mombasa was done by medical doctors who lacked the knowledge and skills of strategic management.

Procurement has been a critical weakness linked to delay and completely unavailability of drugs and equipment in devolved health centers. Medicines and medical equipment constitute a significant part of the budget for health. Lack of drugs in the public facilities has been witnessed over the decades, and the most significant challenge is the procurement which is linked to poor monitoring, embezzlement of funds and uncontrolled politics (World Bank, 2005).
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction
This chapter comprises the procedure used in collecting and analyzing data. It consists of the following sub-headings: study area, research design, unit of analysis and unit of observation, target population, sample and sampling procedure, research instruments, the validity of the tools, reliability of the instruments, methods of data collection, data analysis technique, and ethical considerations.

3.2 Study Area
Chuka General Hospital is located in Chuka town Tharaka Nithi County along Meru-Nairobi highway. The hospital offers various services like outpatient, inpatient services, youth-friendly services, tuberculosis diagnosis, tuberculosis treatments, tuberculosis labs, radiology services, immunization and home-based care. The hospital has 127-bed capacity and services are offered 24 hours. Three hundred forty-two employees consist of 23 doctors, 27 clinical officers and 127 nurses, 25 administration staff and 53 support staff. Chuka General is the only county referral hospital and is the biggest public health facility in Tharaka Nithi County.

3.3 Research Design
The study adopted a descriptive survey research design. Descriptive design explains the phenomenon as it occurs or the characteristics of a population by asking the individuals about their attitudes and perceptions (Mugenda & Mugenda, 2003). The descriptive survey research design also helps the researcher to generate in-depth information regarding a specific phenomenon.

3.4 Unit of Analysis and Unit of Observation
The unit of analysis was the study of devolution and its influence on the provision of healthcare services in Tharaka-Nithi County, Kenya. The unit of observation was Chuka General Hospital health workers, specifically doctors, clinical officers and nurses.

3.5 Target Population
Population entails a group of people, objects or events with common features (Mugenda & Mugenda, 2013). The study population was 177 health workers in Chuka General Hospital specifically doctors, clinical officers and nurses.
Table 3.1: Target population

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Frequency (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>Clinical Officers</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>Nurses</td>
<td>127</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Chuka General Hospital Report (2018)

3.6 Sample and Sampling Technique

3.6.1 Sample Size

According to Kothari (2004), a sample is a sub-set of the entire population and acts a representative. An optimum is the best since it fulfills the requirements for flexibility, reliability, representation and efficiency. In this study, a sample size of 123 was used.

Sample size determination

\[ n = \frac{N}{1 + N(e)^2} \]

Where \( n \) = sample size

\( N = \) Target population (177)

\( e \) = acceptable margin of error of 5%

\( n = \) Sample size (123)
Table 3.2: Sample size distribution

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Target Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>Clinical Officers</td>
<td>27</td>
<td>19</td>
</tr>
<tr>
<td>Nurses</td>
<td>127</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>123</td>
</tr>
</tbody>
</table>

Source: Researcher (2018)

3.6.2 Sampling Technique

Sampling is the means of selecting the sample size from a defined population. The sample size should be a suitable representative of the whole population.

Proportionate stratified random sampling was used to select the sample size of each stratum. This was done by dividing the population of each stratum by a sampling fraction of 1.44 to get a sample size of 16, 19 and 88, respectively. Sampling fraction of 1.44 was arrived at by dividing the entire population of 177 with the whole sample of 123, which was earlier, determined through a statistical formula. Simple random sampling was then applied to get the determined sample of each stratum from its respective population. Simple random sampling was done by the use of random tables since the population, and the sample size of each stratum was available. The key informants were selected using purposive sampling.

3.7 Data Collection Methods and Instruments

3.7.1 Survey

To collect quantitative data, a survey method was used. A survey method is appropriate when collecting data from a large population. It allows comparison of numerical data gathered. A questionnaire was used since it is the most appropriate when doing a survey.
According to Mugenda and Mugenda (1999), a questionnaire provides detailed answers to a given problem.

### 3.7.2 Key Informant Interviews
Qualitative data was collected through interviews from key informants who included hospital administration and heads of departments. A structured interview guide was used as a tool. Through interviews, in-depth data can be collected from the respondents.

### 3.7.3 Document Review
Secondary data was collected from journals, books, research reports, internet sources, newspapers and government publications. This was majorly used in the literature review and the discussion section. For easy review, a checklist of the documents to be reviewed was developed.

### 3.8 Validity and Reliability of Research Instruments
Validity is the ability of an instrument to measure what it is supposed to measure. To ensure the instruments are valid, the supervisor helped the researcher in reviewing if the instruments were in line with the topic and objectives of the study.

According to Muijs (2010), reliability measures if the same results are achieved if a study repeats the same experiment. Yin (1994) asserts that the critical aim of reliability is to minimize the biases and inaccuracy of the research.

### 3.9 Data Analysis Technique
After collection of data, coding and analysis was done using the Statistical Package for Social Sciences (SPSS) version 22. Quantitative data was presented using tables, charts and graphs. Chi-Square was computed and used to show the associations between variables. In addition, qualitative data was used to complement and this was presented in form of themes and well discussed narratives following the research objectives. In this section, quotes indicating every respondent were used.
3.10 Ethical Considerations
Confidentiality was assured to the participants in the study. All the information they provided was used appropriately and in the right manner. Informed consent was given to the respondents indicating the reasons as to why the study was carried and the benefits of the research to them and the general public. This allowed the participants in the study to answer the questions freely. Volunteerism was enhanced in the study and the researcher selected the study site without any vested interest. The researcher obtained an authorization letter from the University of Nairobi and presented it to the management of Chuka General Hospital for permission to carry out the study. The permit was given by the medical superintendent who authorized the researcher to collect the data.
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction
Data on devolution and its influence on the provision of healthcare services in Tharaka-Nithi County, Kenya, were presented in this chapter. This section used frequency tables, graphs, and charts to present quantitative data, which was further supplemented by qualitative data arranged in the order of study objectives.

4.2 Response rate
About 123 respondents were sampled and given the questionnaires, but only 88 (71.5%) returned fully, and 35 (28.5%) did not, as shown in Table 4.1.

Table 4.1 Response rate

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>88</td>
<td>71.5</td>
</tr>
<tr>
<td>Non-response</td>
<td>35</td>
<td>28.5</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>100</td>
</tr>
</tbody>
</table>

According to Mugenda and Mugenda (2003), a 50% response rate is worth reporting, 60% is great, and above 70% is excellent. This study had 71.5%, hence, making it worth and excellent for reporting.

4.3 Demographic Information
In this section, the respondents were requested to provide their background information. The information studied included gender, age, job cadre, duration of work, and level of education.

4.3.1 Gender distribution
The respondents were distributed based on gender, and the majority of them 63 (72%) were female, and 25 (28%) were male, as indicated in Figure 4.1.
The targeted genders were represented in the study. More females participated in the study than males. This implies that more female health workers were employed in Chuka General Hospital.

### 4.3.2 Age distribution

Majority of the respondent (28.4%) were of the age 25-29 years, 19.3% were of the age 30-34 years, 18.2% belonged to age category of 20-24 years, 15.9% were of age 45 years and above, 11.4% were in the age category of 35-39 years and 6.8% were 40-44 years as indicated in Table 4.2.

**Table 4.2: Age distribution of the respondents**

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>16</td>
<td>18.2</td>
</tr>
<tr>
<td>25-29</td>
<td>25</td>
<td>28.4</td>
</tr>
<tr>
<td>30-34</td>
<td>17</td>
<td>19.3</td>
</tr>
<tr>
<td>35-39</td>
<td>10</td>
<td>11.4</td>
</tr>
<tr>
<td>40-44</td>
<td>6</td>
<td>6.80</td>
</tr>
<tr>
<td>45 and above</td>
<td>14</td>
<td>15.9</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>
All ages targeted were represented in the study. Age category of 20-24, 25-29, and 30-34 represents the younger group. Age category of 30-34 and 35-39 represents middle age. Lastly, some respondents with 45 years and above represent middle age and older groups. This means that there were more young health workers in Chuka General Hospital. Research shows that young people save many lives due to their enthusiasm for work, and they are still energetic, mainly when motivated.

### 4.3.3 Job cadre

The respondents’ were requested to indicate their job cadre. About 64.8% were nurses, 20.5% were clinical officers, and 14.8% were doctors, as shown in Table 4.3.

<table>
<thead>
<tr>
<th>Job Cadre</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctor</td>
<td>13</td>
<td>14.8</td>
</tr>
<tr>
<td>Clinical Officer</td>
<td>18</td>
<td>20.5</td>
</tr>
<tr>
<td>Nurse</td>
<td>57</td>
<td>64.8</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

All job cadres targeted were represented in the study. This means that Chuka General Hospital had employed more nurses as compared to other job cadres. Health facilities with adequate numbers of licensed registered nurses are known to promote better healthcare.

### 4.3.4 Duration of work

The respondents’ duration of work in Chuka General Hospital was assessed. Nearly 46.6% worked in the facility for 3-6 years. About 34.1% had worked for below 2 years, 11.4% for over 11 years, and 8.0% for 7-10 years, as indicated in Table 4.4.
Table 4.4: Duration of work

<table>
<thead>
<tr>
<th>Duration of work</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 2 years</td>
<td>30</td>
<td>34.1</td>
</tr>
<tr>
<td>3-6 years</td>
<td>41</td>
<td>46.6</td>
</tr>
<tr>
<td>7-10 years</td>
<td>7</td>
<td>8.0</td>
</tr>
<tr>
<td>Over 11 years</td>
<td>10</td>
<td>11.4</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

All years targeted were represented. This means that the majority of the respondents had some experience working at Chuka General Hospital. This made them more informed about the devolution of health services.

4.3.5 Level of education of health workers

Regarding education, 67% of the respondents had schooled up to diploma level, 27.3% degree, 4.5% certificate, and 1.1% masters, as shown in Figure 4.2.

Figure 4.2: Level of education

This indicates that the facility had employed literate health personnel, and this boosted the delivery of effective health services.

In conclusion, the data show that the majority of the respondents were females. The younger group participated in a high number, and more nurses were employed in the
facility as compared to other job cadres. Most had worked for 3-6 years and were educated with the majority having done up to diploma level.

4.4 Human Resource Capacity
The first objective of the study was to assess the human resource capacity on the provision of healthcare services. The indicators studied were salaries, staffing, working hours, and training. Besides, the Chi-Square test was used to show the association between human resource capacity and the provision of healthcare services.

4.4.1 Increment of salary
The study investigated if respondents’ salaries had increased since devolution. The majority (50.0%) indicated that there had been an increment of wages after the introduction of devolution. About 37.5% said no increment, and 12.5% were not sure if it had increased, as shown in Table 4.5.

Table 4.5: Increment of salary

<table>
<thead>
<tr>
<th>Increment of salary</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44</td>
<td>50.0</td>
</tr>
<tr>
<td>No</td>
<td>33</td>
<td>37.5</td>
</tr>
<tr>
<td>Not sure</td>
<td>11</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

This shows that respondents were somehow motivated by the increment of salary to work, and this enhanced the positive provision of healthcare services. To substantiate this, the matron who was a female and of age category 45 and above, said the following words:

“Our salaries have indeed increased, but even before devolution, health workers were entitled to annual increment through the national government. The county government made only a slight increment. County government has promised a lot to the health workers in terms of salary increment and rewards which are yet to be fully fulfilled, but they are trying” (Key Informant 3).

To support the findings, KMPDU (2013) asserts that the devolution of human resources has resulted in several strikes by the health workers due to their unmet needs. According
to Rondinelli (2010), the Philippines and Uganda have devolved their health workforce and the local governments given the mandate to recruit and fire personnel. In the two countries, political influence has been affecting the health workers' benefits and salaries levels. The same is witnessed in Kenyan health facilities.

### 4.4.2 Salary description

The respondents were asked about the option that could best describe the salary they earn. About 68.2% indicated that the pay was inadequate, 21.6% was very inadequate, 9.1% was adequate, and 1.1% very adequate, as showed in Table 4.6.

<table>
<thead>
<tr>
<th>Salary description</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very inadequate</td>
<td>19</td>
<td>21.6</td>
</tr>
<tr>
<td>Inadequate</td>
<td>60</td>
<td>68.2</td>
</tr>
<tr>
<td>Adequate</td>
<td>8</td>
<td>9.1</td>
</tr>
<tr>
<td>Very Adequate</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

This shows that health workers still need more salary increments for them to be satisfied. Despite the salary being inadequate, the respondents were able to be paid before the date 31st of every month. Timely wage pay motivates health workers, and this positively influences the provision of health care services. This was supported by the head of finance who explained how they timely paid the staff:

"Sometimes, health workers receive the salary as early as date 24th, but most of the months they are paid on 28th to 31st” (Key Informant 2).

### 4.4.3 Staffing

The respondents were requested to indicate if staffing had increased or decreased in terms of numbers after the introduction of devolution. Nearly 48% reported that staffing in terms of numbers had been reduced, 42% said that it had increased, and 10% were not sure as showed in Figure 4.3.
Figure 4.3: Staffing

This implies that health workers were inadequate, and this made them attend many patients in a day. To support this, the acting medical superintendent pointed out that:

“When county government employs health workers, most of them are posted to dispensaries; there is an assumption that big hospitals like Chuka have many health workers but not true” (Key Informant 4).

The inadequacy of health workers has been seen to cause poor delivery of services. Mshelia, Huss, Mirzoev, Elsey, Baine, Aikins, Martineau (2013) argue that Sub-Saharan African countries face a challenge of scaling up their health services and fail to provide universal healthcare services due to lack of adequate and well-motivated health workers. This problem needs attention, and the amicable way of solving it is by training more health personnel and providing incentives. Besides, providing an enabling environment is critical for improved health services. Inadequate staffing may also be caused by brain drain. Magokha (2015) assert that the health sector faces the challenge of brain drain which results in 30%-40% which estimate to 600 doctors of the graduate annually move to other countries for better jobs.

4.4.4 Number of patients

The respondents were asked to indicate the number of patients they attend to per day. The majority of (60.2%) indicated 101 and above patients. About 19.3% attended 61-80 patients, 13.6% attended 81-100 patients, and 6.8% attended 41-60 patients, as showed in Table 4.7.
Table 4.7 Number of patients

<table>
<thead>
<tr>
<th>Number of patients</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>41-60</td>
<td>6</td>
<td>6.8</td>
</tr>
<tr>
<td>61-80</td>
<td>17</td>
<td>19.3</td>
</tr>
<tr>
<td>81-100</td>
<td>12</td>
<td>13.6</td>
</tr>
<tr>
<td>101 and above</td>
<td>53</td>
<td>60.2</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

The respondents attended more patients than the recommended number. WHO (2016) suggests the doctor-patient ratio be 1:1000. In Canada, the ratio is 2:1000. A study done by Chitere & Ngundo (2015) found out that in Kakamega and Kajiado counties, the ratio was 1:14,246 and 1:76,000, respectively. This problem is caused by the lack of enough health workers in the facilities. The study further found out that despite this challenge of more patients attended by a few health workers, the number of patients treated had increased after devolution. The increase of patients in a facility is a good indicator that services offered somehow satisfy them. The high number of Kenyans uses the lower public facilities since they cannot access the highest-ranked public hospitals with specialists. Generally, general practitioners and other health workers in Kenya are less compared to the demand, which is rising daily (Ministry of Health, 2013).

4.4.5 Average number of working hours

Out of 88 respondents, 68.2%, as the majority, worked for 7-9 hours. Nearly 25.0% worked for 10-12 hours, 6.8% worked for 4-6 hours, as indicated in Table 4.8.
Table 4.8: Average number of working hours

<table>
<thead>
<tr>
<th>Average number of working hours</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-6</td>
<td>6</td>
<td>6.8</td>
</tr>
<tr>
<td>7-9</td>
<td>60</td>
<td>68.2</td>
</tr>
<tr>
<td>10-12</td>
<td>22</td>
<td>25.0</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Majority of the health workers worked within the standard of 8 hours as recommended.

4.4.6 Trainings

The respondents were requested to indicate if they went for training supported by the facility to improve their skills. About 64.8% said that they did not go for training to improve their skills, and 35.2% indicated that they attended various training, as showed in Table 4.9.

Table 4.9: Trainings

<table>
<thead>
<tr>
<th>Trainings</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>31</td>
<td>35.2</td>
</tr>
<tr>
<td>No</td>
<td>57</td>
<td>64.8</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Those who said that they attended training supported by the facility further indicated that the training was in the form of formal schooling, workshops, and conferences. The findings have been supported by Mwiti (2015), who conducted a study on factors influencing the quality of free maternity services in Chuka general hospital. The author found out that for the last two years, the respondents had not taken any training for skills improvement. Training is essential because it improves the knowledge and skills of offering healthcare services. The matron who had stayed in the facility quite long explained the reason why the training of health-workers was not effectively done:
“We had come up with a scheme to facilitate staff training consistently, and it was never implemented. We have been facing a challenge of resources to enhance this, but we do facilitate few less costly training” (Key Informant 3).

This was supported by procurement officer of age category 30-34 and who was also well versed in health management:

“Nowadays, only a few staff who are going for formal training to increase their education. This is because no promotions have been done for long, and those who are finishing schools are not promoted immediately. When health workers were under the national government, they moved in grades” (Key Informant 1).

Having been part of the management for long, the matron was of the opinion that human resources highly influence the provision of healthcare services:

“In all areas that require good productivity, investing in human resources is advisable. Especially having good salaries and motivations is more than enough. Failure to appreciate staff can affect many activities. You have seen them going to the street and leaving patients dying in beds” (Key Informant 3).

Table 4.10: Chi-Square Test on human resource capacity and the provision of devolved healthcare service

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp.Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>105.517*</td>
<td>42</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>81.613</td>
<td>42</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>1.548</td>
<td>1</td>
<td>.213</td>
</tr>
<tr>
<td>Association N of Valid Cases</td>
<td>88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results indicate that P-value =0.000 and $X^2 = 105.517$, which shows an association between the human resource capacity and provision of devolved healthcare service since $P<0.05$. Thus, there is a significant association between human resource capacity and provision of devolved healthcare service.

P-value =0.000; $X^2 = 105.517$
The reason for this association is possible because for devolved healthcare to be sustainable and effective, competent health workers need to play a key role. This is supported by Mills (2011), who asserts that human resources are a key function in the health system since a competent workforce is needed for effective health service delivery. This means having the right service providers at the right time with the required knowledge and skills.

4.5 Health Financing

The second objective of the study was to assess the influence of health financing on the provision of healthcare services. The indicators studied were the adequacy of funds, timely allocation, health budgets, and financial reports. Chi-Square test was also used to show the association between health financing and the provision of healthcare services.

4.5.1 Adequacy of funds

The majority of respondents (48.9%) indicated that financing was not enough since the introduction of devolution. About 33.0% said that it was adequate, and 18.2% were not sure about the funding as shown in Table 4.11.

<table>
<thead>
<tr>
<th>Adequacy of funds</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>29</td>
<td>33.0</td>
</tr>
<tr>
<td>No</td>
<td>43</td>
<td>48.9</td>
</tr>
<tr>
<td>Not sure</td>
<td>16</td>
<td>18.2</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Lack of enough funds interferes with operations such as the timely delivery of drugs. One of the finance officers argued that the finances disbursed were not adequate:

“The only area I have seen the county government increasing financing is the development of infrastructure. We have new buildings and KMTC is coming up also since Chuka University now hosts it. In other areas like the feeding of our patients, it is poorly done due to lack of finances to provide a balanced diet” (Key Informant 5).

The respondents gave out their views on how more funds could be raised other than waiting for the national government. These include; management to come up with internal
generating activities, lobby for partners. Despite being young and new in the management, the acting medical superintendent had already started such partnerships:

“We already have partners like Afya plus and Kamili who support us on HIV section. The challenge is that they also rely on donor funding, sometimes their activities may be halted by lacking funding as well, but so far, they are doing good” (Key informant 4).

The findings are supported by Kaseje (2006), who says that in Africa specifically in Kenya, health financing depends much on the out-of-pocket payments and generally, the African countries are constrained by the inadequate funding to improve service delivery at county levels.

4.5.2 Timely financing

The respondents were asked if Chuka General Hospital receives finances on time to enable the adequate provision of health services. About 73% indicated that the facility did not receive finances on time, 18% said that they received the funds in time, and 9% were not sure about timely financing, as indicated in Figure 4.4.

Figure 4.4: Timely financing

Delay in financing negatively affects healthcare service delivery. Another finance officer pointed out that the introduction of pay bills was good but funds allocation to the facility was not done promptly:
“Today, patients pay the hospital bills through a pay bill number managed by the county government. With this effective method in place, we expect the allocations to be promptly done as well (Key Informant 6).

Besides, the respondents were not aware of the amount of finances allocated in past years to the facility. This was contributed by the fact that they could not access the allocations made to various projects and departments. Some respondents could access the allocations reports but were not interested in knowing about it. According to Oketch (2014), financial plans and health budgets should be done on time to enhance support from the donors to facilitate development. A study by Miriti (2016) indicated that 69.8% of the respondents said that funding of health facilities was not timely.

### 4.5.3 Health budgets

The study assessed if health budgets were timely implemented and responses. About 53.4% were not sure about the implementation of health budgets, while 27.3% said that they were timely implemented, and 19.3% indicated health budgets were not timely implemented, as seen in Table 4.12.

**Table 4.12: Health budgets**

<table>
<thead>
<tr>
<th>Health budgets</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>24</td>
<td>27.3</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>19.3</td>
</tr>
<tr>
<td>Not sure</td>
<td>47</td>
<td>53.4</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Timely implementation of budgets ensures the effective delivery of healthcare services. However, the majority of the respondents said that they could not make to go through the financial reports, including the health budgets of the facility. According to the head of finance, the aspect of financing was vital in the provision of healthcare services:
"We normally ensure that the finances available are used effectively since they are like the heart of hospital for smooth running of activities. The key challenge is that these finances are not enough, and they normally delay. It is the high time for us as the management to start mobilizing funds from other sources and following the budget timely to avoid impromptu spending. Combining external sources of funds and those from the national government can boost healthcare provision" (Key informant 2).

Table 4.13 Chi-Square Test on health financing and the provision of devolved healthcare service

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp.Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>161.092</td>
<td>54</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>105.997</td>
<td>54</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>14.196</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results indicate that P-value =0.000 and $X^2 =161.092$, which shows an association between the health financing and provision of devolved healthcare service since $P<0.05$. Thus, there is a significant association between health financing and provision of devolved healthcare service.

P value =0.000; $X^2 =161.092$

This association indicates that health financing is an essential devolved aspect that influences the provision of healthcare services. This is supported by Oketch (2014) work, which states that health budgets are majorly funded through tax generated income and donor funding. It is, therefore, critical to enhancing equitable distribution in geographical regions to promote access to excellent health care services.
4.6 Leadership and Governance

The third objective of the study was to establish the extent to which leadership and governance influence the provision of healthcare services. The indicators studied were awareness of strategic plans, mode of communication, consultations, supervision, roles, and responsibilities. Chi-Square test was also used to show the association between leadership and governance and the provision of healthcare services.

4.6.1 Strategic plan

The respondents were asked if they had gone through the Chuka General Hospital strategic plan. Majority of respondents (77.3%) indicated no, showing that they had not gone through it and 22.7% had reviewed the strategic plan as indicated in Table 4.14.

Table 4.14: Strategic plan

<table>
<thead>
<tr>
<th>Strategic plan</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>20</td>
<td>22.7</td>
</tr>
<tr>
<td>No</td>
<td>68</td>
<td>77.3</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

For those who indicated no, said that the strategic plan was available but did not have time for it and others thought that it was not available. This has a negative influence on the provision of healthcare services since the health workers may work without being guided by the main goal and targets of the facility, which are provided in the strategic plan. Therefore, they may find themselves deviating from the focus and the required standards.

The matron was part of making several strategic plans for the facility and said the following:

“Well, we have a strategic plan though we don’t follow everything in it since there are emerging issues that make us deviate. The current plan has been developed this year (2018), and it is yet to be implemented” (Key informant 3).
4.6.2 Better leadership and governance

The respondents were requested to indicate when the leadership and governance of health services was/is better. About 56% said that leadership and governance were better before devolution, and 34% believed that it was better off after devolution, and 10% were not sure, as shown in Figure 4.6.

**Figure 4.5: Better leadership and governance**

![Better leadership and governance](chart)

The head of clinicians who was there before devolution could share his experience about leadership:

“Leadership before devolution was better because today there is a lot of political influence from the county government. One can be fired anytime. Like now, the medical superintendent was removed, and now we have an acting one. The county has micromanaged everything; we cannot make some decisions; otherwise, consequences will follow” (Key informant 7).

It is clear that the Chuka General Hospital leadership lacks the freedom to make independent decisions because of fear from the county government. This is an issue that may compromise the standards of provision of healthcare services after leaving everything to be done by county government officials, and some lack the knowhow of health systems.

4.6.3 Consultations

The respondents’ were asked if the current leadership at Chuka General Hospital do consultations. Nearly 45.5% indicated no, showing that no consultations were done, and 35.2% said yes, showing that they did consultation while 19.3% of the respondents were not sure as shown in Table 4.15.
Table 4.15: Consultations

<table>
<thead>
<tr>
<th>Consultations</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>31</td>
<td>35.2</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>45.5</td>
</tr>
<tr>
<td>Not sure</td>
<td>17</td>
<td>19.3</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Those who said yes lamented further that consultations were made through departmental heads. In a health facility, it is also essential to hear the opinions of health workers individually since they deal with the patient directly. Wavomba & Sikolia (2015) study indicated that lack of participative management resulted in medical staff being demotivated and finally contributing to the lack of job satisfaction.

4.6.4 Communication

The respondents were requested to indicate the most common method used in communicating within the facility. The majority of the respondents (63.6%) reported that the communication was done through an internal memo, 27.3% said through what apps, 5.7% office phone calls, and 3.4% through emails, as shown in Table 4.16.

Table 4.16 Communication

<table>
<thead>
<tr>
<th>Communication</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal memo</td>
<td>56</td>
<td>63.6</td>
</tr>
<tr>
<td>Office phone calls</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td>Whatapps</td>
<td>24</td>
<td>27.3</td>
</tr>
<tr>
<td>Email</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Ways of communicating matter a lot in any working place. Effective methods of communication enhance good rapport between the staff and management, which in the long run, promote good health through effective practice.
The respondents were further asked if there was a biometric machine within the facility that they used to sign in and out. All the respondents (100%) attested that indeed there was a biometric machine where they signed in and out of work. This is a proper monitoring and communication system which aims at improving the healthcare services.

4.6.5 Roles and responsibilities
The responses of if roles and responsibilities were clear are indicated in Table 4.17. Around 95.5% of the respondents said that their roles and responsibilities were clear, while 4.5% reported that they not clear.

**Table 4.17 Roles and responsibilities**

<table>
<thead>
<tr>
<th>Roles and responsibilities</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>84</td>
<td>95.5</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

For quality purposes, it is essential to have clear roles and responsibilities in the workplace. Lack of commitment and clear roles and responsibilities by the health workers has been linked to poor leadership in organizations. The impact of this is the loss of lives in the health facilities (Kuria, Namusonge & Iravo, 2016).

4.6.6 Rating of the leadership and governance
The majority of the respondents (65.9%) rated the current leadership and governance as somehow effective, 21.6% as ineffective, 12.5% effective, 0% very ineffective, and very effective, as shown in Table 4.18.

**Table 4.18 Rate of the leadership and governance**

<table>
<thead>
<tr>
<th>Rate of the leadership and governance</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>Very ineffective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ineffective</td>
<td>19</td>
<td>21.6</td>
</tr>
<tr>
<td>Somehow effective</td>
<td>58</td>
<td>65.9</td>
</tr>
<tr>
<td>Effective</td>
<td>11</td>
<td>12.5</td>
</tr>
<tr>
<td>Very effective</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>88</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

This shows that the leadership in the facility was not badly off. A procurement officer pointed out that:

“Yes, especially proper communication and listening to employees grievances is of much importance in the delivery of service. The management needs to improve on this, and for sure, things can change here” (Key Informant 1).

A study was done by Alloubani, Almatari, and Almukhtar (2014) on the effects of leadership styles on health service delivery found out that transformational leadership was the most effective style and influenced positive outcomes in an organization. This kind of leadership also incorporates key stakeholders in the decision making and initiatives of the organization.
### Table 4.19: Chi-Square Test on leadership and governance, and the provision of devolved healthcare service

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp.Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>218.963a</td>
<td>60</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>123.524</td>
<td>60</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>16.515</td>
<td>1</td>
<td>.000</td>
</tr>
</tbody>
</table>

N of Valid Cases 88

The results indicated that P-value =0.000 and $X^2=218.963$, which shows an association between leadership and governance, and the provision of devolved healthcare service since $P<0.05$. Thus, there is a significant association between leadership and governance and the provision of devolved healthcare service

P-value =0.000; $X^2=218.963$

Therefore, this means that leadership and governance are important aspects that influence the provision of devolved healthcare services. The findings are in line with the argument of Berman & Bosset (2010), who asserts that to have effective health care interventions in place, devolved units require a clear chain of commands, effective policymaking, and rules that reflect transparency. Stakeholders should be actively participating in matters related to county policy, and there should be open information. Integrity in governance must be enhanced for transparency and accountability.

### 4.7 Procurement

The fourth objective of the study was to establish the extent to which procurement influences the provision of healthcare services. The indicators studied were the procedure of procurement, the involvement of stakeholders, and the availability of drugs and
equipment. Chi-Square test was also used to show the association between procurement and provision of healthcare services.

### 4.7.1 Better procurement

The respondents indicated if the process of procurement today was done better than before devolution. The majority of them (42.0%) reported no, showing that the process of procurement was not done better today. About 30.7% said yes, indicating that it was done better, and 27.3% of the respondents were not sure, as shown in Table 4.20.

**Table 4.20: Better procurement**

<table>
<thead>
<tr>
<th>Better procurement</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>27</td>
<td>30.7</td>
</tr>
<tr>
<td>No</td>
<td>37</td>
<td>42.0</td>
</tr>
<tr>
<td>Not sure</td>
<td>24</td>
<td>27.3</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

This implies that procurement had issues, and this caused delays of essential things like drugs. The procurement officer was very open especially in reference to year 2013-2017, he pointed out that there was an issue of timely paying of suppliers:

```
"Procurement has a lot of issues everywhere. For sure, especially in Chuka hospital, we cannot say we have been timely paying the suppliers. The county government has tried to improve it, but still, there is delay due to the long process of procurement and delay of financing from the national government. Some suppliers of last county leadership have not even been paid! KEMSA is a victim to this, but at least it has been paid some debts "
(Key informant 1)
```

A procurement review report by the Kenya Medical Supplies Agency (2008) indicates that there has been no effective procurement plan for guidance when tendering and contracts are being made. Suppliers have been experiencing a challenging of not being paid, and this was a result of a lack of pre-procurement planning. The report suggested the need to have proper documentation of all procurement processes.
4.7.2 Procurement of drugs

The respondents responded about how drugs are procured. About 62.5% said that they are purchased directly from KEMSA, 26.1% did not know, 6.8% through county government, and 4.5% directly from other drug companies, as indicated in Table 4.21.

**Table 4.21 Procurement of drugs**

<table>
<thead>
<tr>
<th>Procurement of drugs</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through the county headquarters</td>
<td>6</td>
<td>6.8</td>
</tr>
<tr>
<td>Directly from KEMSA</td>
<td>55</td>
<td>62.5</td>
</tr>
<tr>
<td>Directly from other drug companies</td>
<td>4</td>
<td>4.5</td>
</tr>
<tr>
<td>Don’t know</td>
<td>23</td>
<td>26.1</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

4.7.3 Availability of drugs for common ailments

Nearly 76.1% as the majority of the respondents said that all drugs for common ailments are not available in the facility, and 23.9% said they are available. The respondents also indicated that drugs are received in the facility quarterly. The responses for the availability of drugs for common ailments were reported in Table 4.22.

**Table 4.22: Availability of drugs for common ailments**

<table>
<thead>
<tr>
<th>Availability of drugs for common ailments</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All available</td>
<td>21</td>
<td>23.9</td>
</tr>
<tr>
<td>Not all available</td>
<td>67</td>
<td>76.1</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>
When all drugs are available in a public facility, patients spend less because they don’t have to buy drugs in chemists and private clinics. The trend of referring patients to buy some of the drugs at chemists outside the facility was pointed out by one of the finance officers who had observed this behavior for quite some time and emphasized that more drugs were needed:

“Treatment is incomplete if patients lack drugs after doctors’ prescription. Outside this facility, some chemists sell a lot of drugs since patients are sent there after prescription of unavailable drugs” (Key informant 5).

Lack of drugs in the public facilities has been witnessed over the decades, and the most significant challenge being the procurement which is linked to lack of monitoring, corruption and uncontrolled political interference (World Bank, 2005).

**4.7.4 Involvement in procurement**

The respondents were asked if they were involved in procurement process or departmental heads. Majority of the respondents (85%) said yes and 15% no as pointed out in Figure 4.6.

**Figure 4.6: Involvement in procurement**

![Involvement in procurement](image)

Those who said yes lamented further that they were consulted through their departmental heads before the purchase of drugs was made. As a representative of management, the acting medical superintendent rated the influence of procurement as high and commented that:
“Lack of good procurement measures can mess up with the facility activities, and this is why drug adequacy is an issue across the country. Therefore, together with the county government, we are coming up with strategies to improve the tendering process to avoid delay of hospital equipment and drugs. We are also trying to encourage the involvement of suppliers and users in the procurement process” (Key Informant 4).

Table 4.23: Chi-Square Test on procurement and the provision of devolved healthcare service

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asymp.Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>200.031a</td>
<td>48</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>104.971</td>
<td>48</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>34.480</td>
<td>1</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results indicate that P-value =0.000 and X2 =200.031, which shows an association between the procurement and provision of devolved healthcare service since P<0.05. Thus, there is a significant association between the procurement and provision of devolved healthcare services.

P-value =0.000; X2=200.031

This means that the procurement of medical equipment is an important aspect that influences the provision of devolved healthcare services. This is supported by Ellis & Hartley (2009), who argue that supply chain management is key in ensuring that there is the right supply of hospital equipment at the right time at reasonable prices. Therefore, the purchasing departments should liaise with nursing departments to ensure that the best equipment is purchased. Quality of care in the health facilities has been largely affected by the lack of resources. Lack of equipment has given health professionals a hard time.
4.8 Provision of Healthcare Services

This section comprises of dependent indicators such as level of improvement, quality and accessibility of health services.

4.8.1 General improvement

The respondents were asked if there has been a general improvement of healthcare services since devolution, a case of Chuka General Hospital. The majority of respondents (50%) indicated yes, showing that there is a general improvement of healthcare services since devolution. 40.9% said no, and 9.1% of the respondents were not sure as indicated in Table 4.24.

Table 4.24: General improvement

<table>
<thead>
<tr>
<th>General improvement</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>44</td>
<td>50.0</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>40.9</td>
</tr>
<tr>
<td>Not sure</td>
<td>8</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

This implied that despite many challenges experienced and various loopholes available, in the real sense, devolution of health services brought some changes in Chuka General Hospital. The human resource personnel also explained that:

“Many facilities have been built and are functional. The county government has renovated some facilities for churches. Some of the ambulances are now operating than before. We have even new equipment bought. Therefore, we cannot completely dispute devolution since some changes are seen physically” (Key informant 8).

4.8.2 Accessibility

The respondents were asked to indicate how accessible the facility is by the patients. The majority of respondents (60.2%) reported that the facility was accessible, 36.4% very accessible, and 3.4% said it is not accessible, as shown in Table 4.25.
Table 4.25: Accessibility

<table>
<thead>
<tr>
<th>Accessibility</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not accessible</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Accessible</td>
<td>53</td>
<td>60.2</td>
</tr>
<tr>
<td>Very accessible</td>
<td>32</td>
<td>36.4</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

Those who indicated accessible further lamented that most patients accessed it through public means/vehicles, motorcycles/bicycles, and some through private means.

### 4.8.3 Diseases

The respondents were asked if some of the diseases they used to refer to other facilities can now be treated in Chuka General Hospital. About 89.8% of the respondents as the majority said that they could be able to address some diseases they used to refer while 6.8% said they still refer, and 3.4% were not sure as indicated in Table 4.26.

Table 4.26: Disease

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>79</td>
<td>89.8</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>6.8</td>
</tr>
<tr>
<td>Not sure</td>
<td>3</td>
<td>3.4</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100</td>
</tr>
</tbody>
</table>

One of these diseases includes acute renal failure. This was supported by a lab technician who said that;

“We now have a dialysis machine and a CT scan. The dialysis machine is already working, but the CT scan is yet to be functional but will soon start working. Before, we used to refer such cases in Nyeri and Kenyatta hospitals” (Key Informant 9).
According to the matron, it was important to concentrate on few health facilities and equip them well:

“When proper health services are available to citizens, their wellbeing also improves. The Cuban health system is a good example we can learn from. In Kenya, we are trying, and I know we will improve, but we need to organize ourselves. I don’t see the need for county government opening new health facilities; the existing ones should be equipped well for quality purpose” (Key Informant 3).

The findings coincide with the World Bank (2012), which asserts that the health sector is considered to be playing a significant function in the welfare of citizens in different nations. How the health sector is run highly determines the appropriateness of the delivery services to people. With the introduction of devolution, health service delivery has been enhanced at the grassroots levels, and overall health improved.

The medical superintendent emphasized the need for strengthening primary health-care levels including dispensaries, health centers, and district referral hospital, to realize proper devolved healthcare system

“For the devolution of healthcare to be well-realized, there is a need to ensure primary care levels are strengthened since we cannot manage to treat all the patients at our level. Many cases can be managed by the community themselves through CHW” (Key informant 4).

In addition, she pointed out that despite the challenges, she was highly supporting county government undertakings and national agenda on health:

“The 4 tier system is essential in the run of the health care system, and more so tier 1 and 2 need full support. We support the big 4 agenda, specifically on the universal healthcare proposed by President Hon. Uhuru Kenyatta. It is important to have community health workers who report various cases on matters of health. Primary care can ensure most of the diseases are prevented at the grassroots level. Isiolo County has already started challenging us since they are now focusing on preventive measures at the primary level” (Key informant 4).
From the responses of key informants, the issue of strengthening primary healthcare levels as a way of boosting devolved healthcare services is meaningful, and a new area that requires a lot of focus. There is no study on devolved healthcare that has mentioned primary care levels as a key strategy of improving the delivery of health services in Kenya. Therefore, to support the devolved and universal health care in Kenya as one of the big 4 agenda, more research needs to be done on the same.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter outlines the summary of the key findings, conclusions, recommendations and suggestion for further research.

5.2 Summary of the key Findings
The following is the summary of the key study findings based on the objectives;

5.2.1 Human Resource Capacity and Provision of Healthcare Services
The study found out that there has been an increment of salary to the Chuka General Hospital health workers after the introduction of devolution, and this motivated them. The health workers who enjoyed the significant increase are the ones who were promoted. The respondents termed their salary as inadequate, but they received it on time without delay. Staffing had decreased in the county government employing staff and posting them to dispensaries, and this made each of them attend more than 101 patients a day. They also did not get a chance to go for training due to a lack of resources for facilitation, and this affected the provision of healthcare services negatively. Therefore, human resource capacity influences the provision of healthcare services where P value =0.000 and $X^2$ =105.517. The study findings coincide with Akacho (2014) results on factors that influenced the provision of health care services in public hospitals in Uasin Gishu District hospital, 74% of the respondents said that understaffing was a primary challenge that affected proper delivery of services.

5.2.2 Health financing and Provision of Healthcare Services
The findings indicate that Chuka General Hospital did not have enough financing of health services after the introduction of devolution. The available finances were also not been able to be received on time, and this caused a lot of delays in the delivery of health services in the facility. The respondents were not aware of the allocation made to the facility by the county government in past years. The majority of the respondents could not make to go through the financial reports of the facility, and those who managed were somehow satisfied. Therefore, health financing influences the provision of healthcare services where P value =0.000 and $X^2$ =161.092. According to Kaseje (2006), in Africa, specifically in
Kenya, health financing depends much on out-of-pocket payments. African countries are constrained by inadequate funding to improve service delivery at county levels.

5.2.3 Leadership and Governance and Provision of Healthcare Services
The study found out that the majority of the respondents were not aware of Chuka General Hospital strategic plan. This has a negative influence on the provision of healthcare services since the health workers may work without being guided by the main goal and targets of the facility. According to the majority of respondents, leadership and governance were better before devolution as compared to now. The hospital leadership involved health workers through departmental heads in decision making. The most common ways of communicating to the staff were through an internal memo, phone calls, and WhatApps. Health workers roles and responsibilities were clear, and biometric was used to monitor their availability in the job. The majority of the respondents rated the leadership and governance as somehow useful, and this positively influenced the provision of devolved health services where P value =0.000 and X² =218.963. The findings are in agreement with Wavomba & Sikolia (2015) study, which indicates that the lack of participative management resulted in medical staff being unmotivated and finally contributing to the lack of job satisfaction. The type of leadership in the organization influences healthcare service delivery. Lack of commitment by the health workers has been linked to poor leadership in organizations.

5.2.4 Procurement and Provision of Healthcare Services
The study found out that the process of procurement was not done better in Chuka General Hospital because a lot of delays were experienced. Health workers, through their departmental heads, were involved in the procurement process before the purchase of critical things like drugs. Not all drugs for main ailments were available since patients were forced to purchase some in chemists and private clinics. Therefore, procurement influenced the provision of devolved health services where P value =0.000 and X² =200.031. A study was done by Zedekiah (2007) on factors affecting the provision of healthcare services in the devolved system of government in Kisumu East Sub County, Kenya revealed that corruption was high in the procurement of medical equipment. Weak procurement policies were identified to be within the devolved health system together with unqualified staff.
5.3 Conclusions
From the study, the conclusions based on the findings were drawn. It can be concluded that human resource influences the provision of devolved healthcare services in Kenya. Inadequate human resource capacity is a critical issue that has made health service delivery to go down. Health workers have not managed to go for training sponsored by the county governments. The study findings have proven that a health facility that lacks inadequate staff and training may have poor delivery of health services.

The study concludes that financing influences the provision of devolved healthcare services in Kenya. The introduction of the devolved systems was expected to increase the funding in the operations of health facilities, but this has not been appropriately met. Disbursement of funds has been delayed since the inception of devolution, and this has affected the delivery of services in terms of delay of medical equipment, drugs, and other operations within the facility.

Leadership and governance have been a significant issue in most of the facilities. The research indicates that the leadership before devolution was better. Many health workers were promoted in the form of grades when they were under the national government, and this was a key motivation. The current leadership and governance in the health facilities have been affected by politics. Therefore, the study concludes that leadership and governance influence the provision of devolved healthcare services in Kenya.

Lastly, the study concludes that procurement influences the provision of healthcare services in Kenya. Despite the involvement of departmental heads in assisting the procuring drugs and equipment, some key stakeholders are not involved in the procurement process, and this has been caused by a high level of corruption in the management of health facilities. Delay in the procurement process has been the reason behind the poor delivery of health services primarily caused by a lack of enough equipment and drugs for patients.
5.4 Recommendations

1. The study recommends that county governments should employ more health workers and offer training to improve their skills. Promotions should be enhanced and be based on merits to encourage them to work smart.

2. The national government should ensure there is timely financing to the county governments. The county governments should also look for more sources of income other than depending only on the national government. By doing this, more financial resources will be available.

3. Though the county governments are in charge of health facilities, various leaders and stakeholders need to be involved in decision making. Leaders should be elected by staff in the health centers based on merits since most of the appointments today come with political influence.

4. The study also recommends that effective policies should be adopted to curb the issue of corruption in the procurement process. For instance, tenders should be awarded when all stakeholders are available and published for the public to see those who have qualified and the reason behind the award. This can be done by adopting e-procurement.

5. Service charters in the county governments should reflect the health needs of the people and community participation be enhanced in health decision making. Strengthen community health strategy is critical.

6. Kenyan citizens need to be taught on the importance of health insurance like NHIF and county governments help in paying for vulnerable households that cannot afford it.

7. County governments should majorly focus on preventive and primary healthcare other than curative measures.
5.5 Recommendations for Further Research

The study was limited to Chuka General Hospital in Tharaka Nithi County; the same study can be done in other counties. The following can also be done;

1. Influence of community participation in the devolved health services.
2. Effects of devolved health services in community development.
3. Effects of health policies in the provision of devolved health services.
4. Impact of NGOs and other private organizations in the delivery of devolved health services.
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APPENDICES
APPENDIX I: QUESTIONNAIRE

Dear respondent,

I am Boniface Munene Rufo, a master’s student at the University of Nairobi department of Sociology and Social work. I am in my final year of master’s studies and I am expected to carry out a research as part of my academic work. Therefore, I am undertaking research on devolution and its influence on the provision of healthcare services in Tharaka-Nithi County, Kenya. You have been selected to participate in this study. I kindly request you to fill in the questionnaire appropriately and the information you will provide will only be used for academic purposes and will be treated with a lot of confidentiality.

SECTION A: BACKGROUND INFORMATION

1. Gender (Tick one)
   1. Female [ ]
   2. Male [ ]
2. Age (Tick one)
   1. 20-24 [ ]
   2. 25-29 [ ]
   3. 30-34 [ ]
   4. 35-39 [ ]
   5. 40-44 [ ]
   6. 45 and above [ ]
3. What is your job cadre (Tick one)
   1. Doctor [ ]
   2. Clinical Officer [ ]
   3. Nurse [ ]
4. Duration of work at Chuka General Hospital (Tick one)
   1. Below 2 years [ ]
   2. 3-6 years [ ]
   3. 7-10 years [ ]
   4. Above 11 years [ ]
5. Level of education (Tick one)
   1. Certificate [ ]
   2. Diploma [ ]
3. Degree [ ]
4. Masters [ ]
5. PHD [ ]

SECTION B: HUMAN RESOURCE CAPACITY

6. Has there been an increment of salary to health workers after the introduction of devolved system?
   1. Yes [ ]
   2. No [ ]
   3. Not sure [ ]

7. With regard to salary, which of the options below best describes the salary you earn?
   1. Very inadequate [ ]
   2. Inadequate [ ]
   3. Adequate [ ]
   4. Very adequate [ ]

8. Which dates do you receive your monthly salary?
   1. 31st and below [ ]
   2. 1st to 5th [ ]
   3. 6th to 10th [ ]
   4. 11th to 15th [ ]
   5. 16th and above [ ]

9. Has staffing in Chuka General Hospital decreased or increased in terms of numbers since the introduction of devolution?
   1. Increased [ ]
   2. Decreased [ ]
   3. Not sure [ ]

10. a) How many patients in average do you attend to in a day?
    1. 20 and below [ ]
    2. 21-40 [ ]
    3. 41-60 [ ]
    4. 61-80 [ ]
    5. 81-100 [ ]
    6. 101 and above [ ]

    b) Has the number of patients you attend to increased after the introduction of devolution?
    1. Yes [ ]
    2. No [ ]
11. What is the average number of hours do you work in a day?
   1. 1-3 [ ]
   2. 4-6 [ ]
   3. 7-9 [ ]
   4. 10-12 [ ]
   5. 13-15 [ ]
   6. 16 and above [ ]

12. a) Has the devolved system through Chuka General Hospital supported you to undergo training to improve your skills?
   1. Yes [ ]
   2. No [ ]

b) If yes, what kind of training?
   1. Formal schooling [ ]
   2. Workshops and conference [ ]

13. Kindly respond to the following statements in connection to Chuka General Hospital by indicating the extent to which you disagree or agree using the Likert scale by ticking the box that defines your answer best.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remuneration enhances effective delivery of service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career development improves health service delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sufficient staff enhances effective delivery of services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff trainings enhances efficiency of health services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting salaries and rewards at the right time promotes service delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION C: HEALTH FINANCING

14. a) Do you think there is enough financing of devolved healthcare services in this facility?
   1. Yes [ ]
   2. No [ ]
   3. Not sure [ ]

   b) If no, how would you advice the management to mobilize for more finances?
   ........................................................................................................................................
   ........................................................................................................................................
   ..............................

15. Does this facility receive finances on time to enable effective provision of health services?
   1. Yes [ ]
   2. No [ ]
   3. Not sure [ ]

16. What challenges as a health worker do you face because of delayed financing?
   ........................................................................................................................................
   ........................................................................................................................................
   ..............................

17. Are you aware of the last allocation made to this facility?
   1. Yes [ ]
   2. No [ ]

18. Are health budgets timely implemented?
   1. Yes [ ]
   2. No [ ]
   3. Not sure [ ]

19. Are you able to go through the financial reports of this facility?
   1. Yes [ ]
   2. No [ ]

   If yes, how is the accountability?
   1. [Unsatisfactory]
   2. [Somehow satisfactory]
   3. [Satisfactory]
   4. [Very satisfactory]
20. Kindly respond to the following statements in connection to Chuka General Hospital by indicating the extent to which you agree or disagree using the Likert scale by ticking the box that defines your answer best.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient financing improves access to health services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timely implementation of health budget brings effectiveness in health service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobilization of funds from donors and public-private partnerships boosts delivery of health services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditing and accountability of health expenditure enhances efficiency of health services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policies regarding receiving and implementation of funds promotes affordability of health services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION D: LEADERSHIP AND GOVERNANCE

21. a) Have you gone through Chuka General Hospital strategic plan?
   1. Yes [ ]
   2. No [ ]

b) If no, does it mean that?
   1. It’s not available [ ]
   2. It’s available but have no time for it [ ]

22. When can you say the leadership and governance of health services was/is better?
   1. Before devolution [ ]
   2. After devolution [ ]
3. Not sure

23. a) Does the current leadership and governance at the facility do consultations?
   1. Yes
   2. No
   3. Not sure

   b) If yes, how?
   1. To individuals
   2. Through departmental heads

24. Which is the common used way of communicating in this facility, through;
   1. Internal memo
   2. Office phone calls
   3. Whatapps
   4. Email
   5. Any other (specify)……………………………………..

25. Are your roles and responsibilities clear in this facility?
   1. Yes
   2. No

26. Is there a biometric machine to sign in and out of work?
   1. Yes
   2. No

27. How do you rate the leadership and governance of this facility?
   1. [Very ineffective]
   2. [Ineffective]
   3. [Somehow effective]
   4. [Effective]
   5. [Very effective]

28. Kindly respond to the following statements in connection to Chuka General Hospital by indicating the extent to which you agree or disagree using the Likert scale by ticking the box that defines your answer best.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper communication at all levels of management brings effectiveness is health services</td>
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<td></td>
</tr>
<tr>
<td>Administration of health budgets enhances efficiency</td>
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</table>
### Defined roles and responsibilities promote quality of health services

| Supervision at the facility enhances quality of health services |
| Health leadership collaborating with other stakeholders enhance effectiveness |
| Leadership that solves employees grievances at the right time brings quality in delivery of health services |
| Availability of strategic plan make health services effective |

### SECTION E: PROCUREMENT AND DISTRIBUTION OF DRUGS

29. Is the process of procurement today done better than before devolution?
   1. Yes [ ]
   2. No [ ]
   3. Not sure [ ]

   If yes or no, explain………………………………………………………………………………………………………………………………………………

30. How are the drugs used in this facility procured?
   1. Through the county headquarters [ ]
   2. Directly from KEMSA [ ]
   3. Directly from other drug companies [ ]
   4. Don’t know [ ]
   5. Any other (Specify)………………………………………………

31. What is the availability of drugs for common ailments?
   1. All available [ ]
   2. Not all available [ ]

   How often do you receive drugs in this facility?
   ……………………………………………………………………………………………………………………………………………………………………………

32. a) Does the facility involve you or your departmental head in the procurement of drugs and other equipment?
   1. Yes [ ]
2. No [ ]

b) If yes, what is the nature of procurement involvement?
   1. Consulted before purchase [ ]
   2. Participate in actual purchasing [ ]
   3. Any other (Specify)…………………………………………

33. Kindly respond to the following statements in connection to Chuka General Hospital by indicating the extent to which you agree or disagree using the Likert scale by ticking the box that defines your answer best.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enough drugs and equipment promotes accessibility of health services</td>
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<tr>
<td>Proper tendering of hospital equipment brings efficiency</td>
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<tr>
<td>Procurement policies and procedures enhance effectiveness of health services</td>
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<tr>
<td>Lack of corruption promotes efficiency of health services</td>
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<tr>
<td>Availability of inspecting body for substandard equipment promotes quality in the health service</td>
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</tbody>
</table>
SECTION F: PROVISION OF HEALTH CARE SERVICES

34. a) Is there a general improvement of healthcare services after devolution?
   1. Yes [ ]
   2. No [ ]
   3. Not sure [ ]

   b) If yes, in what ways?

   ........................................................................................................
   ........................................................................................................

35. a) How accessible is this facility by patients within the county?
   1. Not accessible [ ]
   2. Accessible [ ]
   3. Very accessible [ ]

   b) Which is the means of transport used by most of patients to this facility?

   ........................................................................................................

36. a) Are there diseases that you used to refer to other hospitals that can now be treated in this facility after devolution?
   1. Yes [ ]
   2. No [ ]
   3. Not sure [ ]

   b) If yes, list those diseases

   ........................................................................................................

   c) What has led to such improvement?

   ........................................................................................................
   ........................................................................................................
   ............

37. Comments (If any)

   ........................................................................................................
   ........................................................................................................
   ..............
38. Kindly respond to the following statements in connection to Chuka General Hospital by indicating the extent to which you agree or disagree using the Likert scale by ticking the box that defines your answer best.

<table>
<thead>
<tr>
<th>Statement</th>
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<tr>
<td>Effectiveness of healthcare services is important</td>
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<tr>
<td>Accessibility of healthcare services is necessary</td>
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<tr>
<td>Efficiency improves healthcare services</td>
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<tr>
<td>Quality should be enhanced to promote healthcare services</td>
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</table>
APPENDIX II: INTERVIEW GUIDES FOR KEY INFORMANTS

I am Boniface Munene Rufo, a master’s student at the University of Nairobi department of Sociology and Social work. I am in my final year of master’s studies and I am expected to carry out a research as part of my academic work. Therefore, I am undertaking a research on influence of devolution on the provision of healthcare services in Kenya. A case of Chuka General Hospital, Tharaka Nithi County. You have been selected to participate in this study. I kindly request you to fill in the questionnaire appropriately and the information you will provide will only be used for academic purposes and will be treated with a lot of confidentiality.

1. Which position do you hold in the facility?
2. How long have you been in Chuka General Hospital?
3. What is your level of education?
4. What is your professional specialization?
5. Have you been in different positions before? If yes, which ones?
6. Has there been an increment of salary for the doctors, clinical officers and nurses after the introduction of devolved system?
7. When do health workers receive their salaries?
8. Has staffing in Chuka General Hospital decreased or increased since devolution?
9. Has the devolved system given health workers a chance to undergo training to improve their skills?
10. Has financing of health services increased since devolution?
11. Do you receive finances on time to enable effective provision of health services?
12. Does Chuka General Hospital have a strategic plan?
13. How do you rate the influence of leadership and governance on provision of devolved healthcare services?
14. Is process of procurement today done better than before devolution?
15. Are all stakeholders involved in the procurement process?
16. Is there a general improvement of devolved healthcare services since devolution?
17. How is the accessibility of this facility by the patients?
18. Generally, how do you comment about provision of devolved health services in Kenya?

Thank you
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By Boniface Rufo

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