

**EFFECTIVENESS OF CITIZEN PARTICIPATION ON HEALTHCARE  
SERVICE DELIVERY IN SIRISIA SUBCOUNTY, BUNGOMA COUNTY,  
KENYA**

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**DECLARATION AND APPROVAL**

**Declaration by the Student**

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## **DEDICATION**

I dedicate this thesis to my family for nurturing me with affectionate love, and their dedicated partnership towards my success in life. These include my dad, brothers, wife and children. The immense sacrifice from their end can never be taken for granted.

## **ACKNOWLEDGEMENTS**

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## ABSTRACT

With the onset of devolution in March 2013 as provided for in the 2010 constitution of Kenya, Citizens have been given an opportunity to directly take part in decision making in the healthcare sector. This was meant to improve the status of healthcare service delivery among county governments in Kenya. However, health service delivery in Sirisia Subcounty has generally lagged behind evidenced by high bed occupancy and low number of medical personnel as cited in the (DHIS, 2019). The general objective of this study was to examine the effectiveness of citizen participation on healthcare service delivery in Sirisia Subcounty. Specifically, this study tested the hypotheses that there is no significant relationship between the magnitude of citizen participation in healthcare service development, level of citizen participation and efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty, Kenya. The study used empowerment theory. Both correlational and descriptive research designs were used. The target population was 17659 household heads and 107 healthcare workers in Sirisia Subcounty. 32 (30%) healthcare workers and 376 household heads in the Subcounty were selected. The healthcare workers were purposively selected while the households were randomly selected. The study relied on both primary and secondary data. Data was analyzed using both qualitative and quantitative methods. For descriptive analysis, both mean and standard deviation were computed. Inferential statistics of Correlation, Regression and ANOVA were used in the study. Results were presented using figures such as tables, charts and graphs. Firstly, results indicated that healthcare development is key in promoting service delivery in the health sector in Sirisia Subcounty ( $r=0.446^{**}$ ;  $P=.000$ ). Results also showed level of citizen participation being paramount in enhancing health care service delivery ( $r=.334^{**}$ ;  $P=.000$ ). Furthermore, it was established that improvement in efficient citizen participation is likely to have a recommendable effect on service delivery at the health facilities ( $r=.617^{**}$ ;  $P=.000$ ). Conclusively therefore, improvement in the three independent variables, will realize 55.9% change in healthcare service delivery in Sirisia. The study also noted that all the null hypotheses were rejected, implying that there is a statistical relationship between all the three independent variables and service delivery in the health facilities. The study concludes that for healthcare service delivery to improve in Sirisia Subcounty, the three independent variables have to be implemented in accordance with the needs of citizens. The study recommends that in order to achieve the main goal of public participation, there is need to create structures, mechanisms and guidelines for citizen participation. Secondly, there is need for the study area to come up with a comprehensive public participation process which should involve stakeholders in the health sector. Lastly, the county should plan for public participation meetings geared towards problem-solving. The findings are expected to enrich available data and create awareness on citizen participation in healthcare both locally, nationally and internationally. To the academia, the study provides an insight into further research by scholars interested in the area of citizen participation.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>ANOVA</b>	Analysis of Variance
<b>CoG</b>	Council of Governors
<b>CIV</b>	Coefficient Validity Index
<b>DHIS</b>	District Health Information Systems
<b>KIPPRA</b>	Kenya Institute for Public Policy Research
<b>KPMG</b>	Klynveld Peat Marwick Goerdeler
<b>NACOSTI</b>	National Commission of Science, Technology and Innovation
<b>SA</b>	Strongly Agree
<b>SD</b>	Strongly Disagree
<b>SPSS</b>	Statistical Package for Social Sciences
<b>SSA</b>	Sub-Saharan Africa
<b>WHO</b>	World Health Organization
<b>HCW</b>	Healthcare Worker
<b>CHV</b>	Community Health Volunteer
<b>CHW</b>	Community Health Worker
<b>CHEW</b>	Community Health Extension Worker
<b>FIF</b>	Facility Improvement Fund

<b>CDF</b>	Constituency Development Fund
<b>NGO</b>	Non-Governmental Organization
<b>WHA</b>	World Health Assembly



## OPERATIONAL DEFINITION OF TERMS

**Citizen participation:** According to this study, it refers to any process that engages citizens in decision making and considers public input in reaching a decision in matters relating to their healthcare.

**Effectiveness:** According to this study, it is the ability of citizen participation to promote efficient healthcare service delivery.

**Efficiency:** In this study, it refers to the extent to which the healthcare system has used limitedly available resources to produce maximum output.

**Healthcare Service Delivery:** For this study, it refers to the services that citizens receive from healthcare professionals including treatment, prevention and management of disease, illness, injury and any other related health issues.

**Healthcare development:** This refers to the physical growth of healthcare facilities in reference to the infrastructure and equipment.

**Levels of participation:** These refer to the phases or stages where citizens are involved during decision making process.

**Magnitude of participation:** This refers to the extent to which the public is allowed to take part in the decision-making process in healthcare system.

**Devolution:** This is the management of the devolved functions of the county, by the county and for the county.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

Citizen participation refers to any process that directly engages citizens in decision-making and considers public input in reaching a decision. Participation contributes to implementable and sustainable decisions because the decisions consider the needs and interests of all the stakeholders, including the vulnerable and marginalized populations (Tenbensen, 2010). When properly done, it helps the stakeholders manage their social issues and appreciate each other's values and interests. Participation efforts have two primary drivers. First, the promotion of sustainable health and healthcare grounded in a sound, publicly accessible evidence base; second is the conviction that involvement is intrinsically valuable, given its democratic commitment to promoting the interests of citizens (Farmer et.al 2018)

The global push for decentralization has made deep roots into the health sector. As a means of encouraging greater citizen participation in the delivery of services, decentralization is consistent with the health sector's emphasis on cost-effective investment in primary healthcare and outreach services that began with the Alma Ata Conference on Primary Healthcare in 1978. This has been more recently reinforced by the World Bank's 1993 World Development Report and the latest World Health Report (Saltman et al., 2007; WHO, 2008). In the western health systems, and other developed countries, it happens that participation programs take place in the "subdomains" of "treatment, service delivery, and system-level decision-making. The concept of primary healthcare has also been given emphasis by various stakeholders both nationally and internationally. This can be affirmed by the WHO ambition on

universal healthcare coverage, the United Nation's sustainable development goal number three on good health and wellbeing, national agenda of various states for example Kenya and United States.

According to a study conducted by Anit (2016), Brazil introduced a new constitution in 1988 that made access to health a basic right and introduced a unified health system for all. The scholar found that devolution changed health model from a privatized system to a state system with the private sector only supplementing the State. Primary and secondary healthcare were provided by state through public and private health facilities. By year the 2012, 54.8 % of the population were covered, which was a manifestation of healthcare coverage. Devolution led to expansion of community and public health centers, which greatly improved health outcomes across the country since devolution embraced the concept of citizen participation.

The scholar also noted that China introduced reforms in sectors such as health in 1994, which were designed to cure the inequality that existed between urban and rural dwellers. This is due to the diverse social, fiscal and economic conditions that urban and rural occupants have. Community health workers were elevated to private medical personnel with the responsibility of facilitating health services to the rural people. This saw an improvement in coverage and quality of healthcare in rural areas. This eventually led to decreased infant mortality rate from 58 to 17 newborns and a decrease in maternal mortality rates. Community healthcare workers were given the opportunity to participate in healthcare activities hence citizen participation.

According to Mohajan (2014), India consists of many national health programs organized through the federal Government. These include; District Mental Health Program, National Cancer Registry Program, National Leprosy Eradication Program, Universal Immunization Program, National Cancer Control Program, National Program for Prevention and Control of Deafness, National Vector Borne Disease Control Program, National Tobacco Control Program and National Program of Healthcare for the Elderly. Although implementation of healthcare is a state assignment, historical centralization in development, planning and the financial strength of the federal government result in little independent planning at the State level, (Mc Collum, 2018).

According to World Health Organization (2014), Sub-Saharan Africa (SSA) faces many public health problems such as shortage of drugs and medical personnel. This calls for strong healthcare systems and workforce that can deliver healthcare services reliably and consistently to address these challenges. However, focus has been on the inadequacy of the region for well-equipped systems to train healthcare professionals to tackle to the drawbacks of the 21st century. Ansari et al. (2011), notes that a number of countries in Africa including Benin, Ghana, South Africa, Zimbabwe, Senegal and Uganda, have adopted a decentralized healthcare system to assess challenges affecting efficiency of the system. Such challenges that are given a lot of focus have included managerial, operational, political and cost related efficiency.

Recent devolution reforms in healthcare across Africa have displayed some interesting outcomes, although a key undercurrent remains central governments' reluctance to let go of power (Chege, 2017). Wanzala and Oloo (2019), noted that

despite advances in the implementation of more ambitious health-care, decentralization plans in Ghana, Malawi and Tanzania, the three countries' policymaking is still based at the center and local governments report a high dependence on central government for funds, allowing for central government interference.

Another study by Dubusho, (2009), found that Ethiopia introduced the concept of devolution in 1996 as a plan to improve the provision of medical care in the nation. The scholar used a survey research design and purely adopted a qualitative method of data analysis. Devolution in Ethiopia gave room for public participation which involved the locals in the healthcare issues compared to the era before 1996 where all decisions were made by the central government. Regional levels were the first devolution recipients and later it was extended to the district levels in the year 2002. Districts received grants from regional level authorities. As such, district units were solely mandated with the role of hiring and firing of health workforce, building and maintenance of health facilities.

In Uganda, conditional central grants have historically made up 70-85% of district-level budgets (Obosi, 2019). Although health-care services have been devolved in Uganda, the national government still controls the budgets and provides conditional grants for the promotion of primary healthcare (Bossert & Beauvais, 2002). The implication of such controls is that the communities and administrators at local levels have limited say over the operations of healthcare services that affect them.

As at August 2010, in a referendum about 67% of Kenyans voted for the new constitution which brought about devolution in Kenya. The new constitution introduced a devolved system of government where many national government

services including health, were delegated to the designated forty-seven county governments. These new counties that were created were based on 1992 Kenya's district framework (KPMG Africa, 2014). The key distinguishing feature between the 2010 constitution and its predecessor, the 1962 Lancaster House constitution, is the level of people's participation.

The new Kenyan 2010 constitution stipulates a robust involvement of citizens, for decision making starting from the grassroots level. According to Article 174 of the new constitution, the main objectives of devolution are: to promote democratic and accountable exercise of power; to foster national unity by recognizing diversity and to allow the power of self-governance and enhance the involvement of the people in making decisions affecting them. Article 43 provides that Kenyans be entitled to the highest attainable standards of health, which includes the right to healthcare services including reproductive healthcare (Stewart, 2013).

In a study conducted by Kubai (2019), in Meru County, on the "Impact of Devolution of Healthcare System in Kenya," it was established that since implementation of devolution especially in the health sector, service delivery has improved in terms of affordability, availability and accessibility to the common citizen. The study also revealed that devolution was being implemented in the correct manner though facing some challenges such as corruption, nepotism, inadequate funds and delayed salaries. The study further established that there is need for counties to work hand in hand with the National Government to ensure resources benefit the larger majority in counties.

The Council of Governors in their report of 2014, placed Bungoma County among the best performed in terms of healthcare service delivery. However, the Health Sector Analysis Report of 2017-2018 shows that its relative efficiency is 43.1%, which is below average. Life expectancy in Sirisia Subcounty is at 56 years with an infant

mortality rate of 43.1 per every 1000 live births whereas the under 5 years' mortality rate is at 83 per every 1000. The bed capacity occupancy is 115 per cent with a nurse-patient ratio of 1:900 (DHIS, 2019), against the 1:400 recommendation of the World Health Organization. It is against this background that the current study sought to establish the extent to which citizen participation has been used as an avenue for the improvement of healthcare services in Bungoma County with key focus on Sirisia Subcounty.

## **1.2 Statement of the Problem**

According to chapter 11 of the 2010 constitution of Kenya, devolution paved way for devolved functions of county governments and healthcare is one of them. Article 118 of the new constitution provides for public participation which gives room for citizen participation in issues affecting them, including healthcare. Decision-making was made citizen-centered rather than government-centered. The main goal was to improve the status of healthcare service delivery among county governments in Kenya. Unfortunately, Sirisia subcounty still lags behind in matters of healthcare service delivery as evidenced by low bed capacity, small number of healthcare providers and high bed occupancy.

There is however dearth of information on efficiency of citizen participation on healthcare service delivery. The present study therefore, sought to analyze the effectiveness of citizen participation on healthcare service delivery in Sirisia subcounty of Bungoma county Kenya, with specific focus to the magnitude of citizen participation on the development of healthcare service, level of citizen participation and efficiency of citizen participation.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The general objective of this study was to examine the Effectiveness of Citizen Participation on Healthcare Service Delivery in Sirisia Subcounty of Bungoma County, Kenya.

#### **1.4 Specific Objectives of the study**

The study sought to address the following objectives;

- i. To establish the magnitude of citizen participation in the development of healthcare service delivery in Sirisia Subcounty.
- ii. To examine the level of citizen participation on healthcare service delivery in Sirisia Subcounty.
- iii. To analyze the efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty.

#### **1.5 Hypotheses of the Study**

The study sought to test the following hypotheses;

**H0<sub>1</sub>:** There is no significant relationship between the magnitude of citizen participation in the development of healthcare service and healthcare service delivery in Sirisia Subcounty.

**H0<sub>2</sub>:** There is no significant relationship between the level of citizen participation and healthcare service delivery in Sirisia Subcounty.

**H0<sub>3</sub>:** There is no significant relationship between the efficiency of citizen participation and healthcare service delivery in Sirisia Subcounty.



## **1.6 Significance of the Study**

While carrying out the study on efficiency in reference to devolved public health sector, the researcher noted that there was no attention given by other scholars on understanding effectiveness in healthcare systems. Apart from the Health Sector Analysis Report 2013-2014 by the ministry of health, which has an aspect of efficiency in the counties, no known study could be accessed analyzing efficiency in the healthcare sector within counties in Kenya. This study is therefore of great significance to the stakeholders in the health sector; the central and County Governments which need to understand the various types of efficiencies that exist in the healthcare system and how they can be applicable in policy making and also in decision making in the counties health sector. The ministry of health will use the findings of this study to improve on policy implementation and to come up with new policies that will help to enhance the efficiency of the systems.

The findings of this study are also of great benefit to the patients and their families as it will ensure that they get services at the hospital within the shortest time possible and that the widely experienced delays are going to be avoided because of the understanding of efficiency. The results will also form a basis for further research in the area of efficiency in healthcare sector, which has experienced many challenges. This will offer the researcher an understanding of the operation of the healthcare and how to make it more effective.

### **1.7 Limitations of the Study**

The population of the respondents constituted of different people from different backgrounds including culture and language. This was a big challenge to interaction and communication. The researcher had to get research assistants from the locality to help in intermingling and communication. Furthermore, non-response to the questionnaires was another challenge to the study. 75 questionnaires were not returned. This was the case despite constant follow ups at the households to request the respondents to attend to the questionnaire. However, the returned questionnaires met the threshold for data analysis since the response rate was 80.05%. This was in line with Kothari who advised that a response rate of above 70% is adequate for use for data analysis in a descriptive survey study.

### **1.8 Scope of the Study**

This study concentrated to address effectiveness of citizen participation on healthcare facilities in Sirisia subcounty in Bungoma County-Kenya. It concentrated specifically on the magnitude of citizen participation on the development of healthcare, the level of citizen participation and efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The section encompasses review of various literature in regards to citizen participation in relation to its efficiency in healthcare systems. Furthermore, it outlines the conceptual framework and summary of gaps to be filled. The works of various scholars were considered in building up this study. Some of them include Farmer et.al (2018); Masaba et.al (2020); Obosi (2019); Njoh (2016); Kunzler (2016); Muga (2010); Ogosi (2020); Dawson (2021); Mohamud (2020); Mbithi (2019); Vabo (2010); Shapiri and Murphy (2013); Efriandi et.al (2017); Oduor et.al (2015); Wainwright et.al (2014); WHO (2019); Anit (2016); KIPPRA (2018) Report; Kubai (2019); COG Report of 2014 and 2017; Whiteley (1995); Moroney (2010); Gastil (2021); Hagelskamp et.al (2013); Mugami and Theuri (2014); WHO Report of 2012; Tenbenschel (2010); Musoke (2011); Ngondo (2014); Kugonza and Mukobi (2016); Papa (2016), among other related scholarly work.

#### **2.2 Empirical literature**

This section presents analytical review of literature in line with the objectives of the study.

##### **2.2.1 Magnitude of citizen participation in the development of healthcare service**

The healthcare sector in Kenya has developed over time for the last many decades. The study assessed this development right from the pre-colonial, colonial to the post-colonial periods. The key distinguishing feature between these historical eras is the magnitude of citizen participation. The first two eras were characterized by absence of

citizen participation as compared to the third, which is the latest and present era in the healthcare sector in Kenya. Decisions were purely top down during pre-colonial and colonial periods, as compared to the post-colonial period in which they are bottom up as a result of citizen participation.

According to Njoh (2016), medical services in Kenya were purely traditional in the precolonial period. This was the era before 1895. The indigenous communities depended on herbal medicine, which were administered by the medicine men and herbalists. Belief systems also played a major role in matters of healthcare. Some diseases were cured through performance of rituals and cleansing ceremonies. Medicine men and ritual performers determined the type of medicine to be used by their clients (Chege, 2017). This is a clear indication that there was no public participation since the patients were forced to abide by all the directives issued by the medicine men. It was a pushy kind of the healthcare service delivery.

The history of modern health services and policies in Kenya dates back to the establishment of religious missions and the arrival of the Imperial British East African Company towards the end of the 19<sup>th</sup> century. When Kenya attained independence in 1963, the independent government took full responsibility of issues concerning healthcare for her population. The Kenyan government published the guideline for implementation of the primary healthcare in 1986. The new policy guideline was aimed at improving healthcare infrastructure for bettering medical services.

The Colonial period, (1895- 1962), ushered a paradigm shift in the management of healthcare. The British colonial government in Kenya took over the responsibility

from the traditional medicine men. The London School of Tropical Medicine, which was opened in 1899, was established to offer specialized training for medical officers before embarking on a career in the colonial medical service (Chege, 2017). The colonial medical officer was working in a colony to fulfil the objectives of the British government, which saw medical colonization as a springboard for political colonization. The mission hospitals played a bigger role in providing healthcare for indigenous Kenyans during the colonial period. However, Africans continued to seek traditional medicine at this time. This is according to the English National Development plan (1997-2001). Africans still believed in their traditional herbs as a cure to most of the diseases affecting them at that particular time. The complacency of the colonial government concerning the health of indigenous Kenyans along with famine and epidemics of the 1910s caused devastating loss of lives of Kenyans (Mohajan, 2014).

Dawson (2021), further noted that the colonial government in 1920s brought some changes geared towards improving the healthcare for the indigenous Kenyans. Dispensaries were set up to offer both inpatient and outpatient services. The indigenous Kenyans who were officially known as medical resident assistants, staffed them. The dispensaries had a traditional dresser for wounds and ulcers, besides the rural dispensers, who conducted the outpatient clinic, refer serious cases to senior officers, keep records, undertake laboratory work and dispense stock mixtures (Njoh, 2016). A European medical officer would make regular scheduled visits to the dispensaries. There was a strict supervisory mechanism of ensuring that Kenyan staff were monitored for proper service delivery (Kunzler, 2016). Moreover, the Kenyan staffs had limited say on issues regarding management of health issues in the places of

their work. There was no freedom of people's participation during this era too. It was still a coercive healthcare system of administration characterized by top-down approach of decision making.

African hospitals in Nairobi started out as the Native Civil Hospitals in the 1940s and the Local Native Council managed them. An example was The King George VI hospital, which was later, renamed Kenyatta National Hospital after independence in 1963. European medicine steadily became popular at this period. Medical services were offered freely, financed by the local taxes (Muga & Jenkins, 2010). After the attainment of independence in 1963, the Kenyan government took over responsibility for the healthcare of its citizens. This was a major paradigm shift here. The independent Kenyan government then got an opportunity to manage the healthcare sector for her population (Stewart, 2013). According to Kunzler (2016), other critical issues of concern were education and economic development which the colonial government of that time was required to include in the development plan.

“One prominent change in the health sector was the expansion of rural health facilities to meet the needs of Kenya's predominantly rural population. Kenya's adoption of the 1977 World Health Assembly (WHA), the 1978 Alma Ata Conference and the WHA strategy of 1981, ushered in a new health policy direction for primary healthcare in Kenya” (RK Otachi, 2008). The new policy resulted in major reorganization and reorientation of the existing health systems and structures based on the principles of decentralization, community participation and inter-sectoral collaboration.

The policy shifted from purely government provision of services to sharing of costs with those receiving the services (Kipruto, 2020). The ministry of health was in charge of most of the decisions regarding healthcare. The technocrats and administrators issued guidelines and orders from the ministry of health, (Ogosi, 2020). This indicates that locals were not given an opportunity to take part in most of the decisions regarding their health, denoting absence of citizen participation.

According to Dawson (2021), government increased alternative financing mechanisms for the healthcare sector. The guideline also focused on embracing a national strategy that sought to provide a wider spectrum of participation by stakeholders and to justify management and delivery of healthcare services. The scholar further noted that the vision of health sector reforms was based on reformation of the system and decentralization of healthcare decision making framework to allow for public participation which is currently captured in the New 2010 Constitution. This immediate study therefore sought to assess how efficiency of citizen participation can improve the healthcare sector in Sirisia Subcounty of Bungoma County in Kenya.

Currently, the Ministry of Health is no longer the only provider of medical services in Kenya. The government expenditure on health accounts for only 44% while the private sector including religious institutions, accounts for the remaining 56%. Furthermore, the private sector accounts for 50% of all the hospitals and 36% of all the available hospital beds. The World Health Organization of 2000 argues that the weakness of the Primary healthcare approach is that it paid too little attention to people's demand of healthcare and therefore undervalued the contribution of the

private sector and influence of the market economy. The assumption of devolving the health sector, allowing for citizen participation is that there would be improved health services and hence status of the population in question. Consequently, this study sought to assess how citizen participation that was brought by devolution, can enhance healthcare service delivery.

KIPPRA (2018) report on assessment of healthcare development in Kenya under devolved system emphasized that, there is significant improvement in the health sector performance. The report also pointed out improved child survival over the last five decades, with reduction of under-five, infant, neonatal and maternal mortality. The nutrition status of children also improved. There is significant decline in communicable disease and the HIV prevalence. However, the report by KIPPRA did not underscore the extent to which effectiveness of citizen participation has been achieved since devolution was embraced. This therefore necessitated the need for the current study.

### **2.2.2 Level of Citizen Participation on Healthcare Service delivery.**

Members of the public's regarded level of influence in public decision-making has been used to describe their level of participation in the government's decision-making process, with low levels of participation being attributed to a low perception by citizens for their influence in the governance process (Schlozman et al., 2012). According to Mohamud (2020), citizens' aspiration to engage in public participation was associated with their perceptions that their ideas would have some influence on the decision-making process. These findings are accordant with those of Williamson and Scicchitano (2014), whose results indicate that citizens would not attend public



meetings if their views are not considered and incorporated into decision-making. The present study sought to concentrate on the efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty, Kenya.

Woltmann and Whiteley (2010) in their study noted that individuals' view of the level of influence they had in decision-making at group level was associated with how the elected leaders viewed their insights. Furthermore, Yang Pandey (2011) observed that the degree of public engagement is related with the likelihood that the information gathered will have an influence on public decision-making, so bringing about legitimacy in the representative process between citizens and government. The scholars further gave more attention to decision-making at group levels, the current study gives more attention to participation at individual level.

Ocloo and Mathews (2016) faulted the 'standard socio-economic model' of political participation which emphasizes that a citizen's socioeconomic status and civic orientation are key predictors of participation. The model postulates that an individual with higher socioeconomic status has a much higher likelihood of participation than those with lower. According to Leighley (1995), the above view ignores the purpose played by mobilization of public participation. Cooper and Bryer (2007) argue that, in order to change the administrative units of government for improved public participation, there is a necessity for leadership which allows for the orientation of public administrators in engaging citizens as partners and not clients as well as being stakeholders in the governance process (Handley & Howell-Moroney, 2010). This has been measured by the democratic composition of local actors in addition to their responsiveness to citizens' needs (Daley, 2008). This political behavior affects public participation, because the adoption of progressive laws has a much likelihood of promoting public engagement (Ebdon, 2000). The present study adopted a theoretical model of empowerment to guide the study. This model is based on the argument

that empowering citizens through citizen participation is the only way of driving healthcare service delivery practice right from the grass root levels of county governments.

Similarly, Mbithi et.al (2019), examined institutional determinants of public participation by assessing gubernatorial performance and vested power. He asserted that a good institutional indicator of public participation lies in the Governor's performance and willingness to place certain legislative powers and also support mechanisms that would result to public participation efforts with their jurisdictions. Moreover, Herina (2011) argues that such professionalism on the part of the Governor may lead to professionalism in local institutions and hence to more open public participation. As Mbithi with other scholars focused on gubernatorial performance on vested power, the current study concentrates on citizen participation on healthcare service delivery.

Struic and Bratic (2018), in their study about public participation in the budgetary process, using a descriptive research design, highlight factors that influence the participation process. These include low turnout, a focus on minimum legal requirements, insufficient representation, and participation taking place towards the end of the decision-making process. Roiseland and Vabo (2016) also suggested that these elements do threaten the legitimacy of the process. In addition, the study by Ho and Coates (2018) on how performance measurement could be made legitimate as a decision instrument shows that public contribution into the budget-making process, provides the government officials with necessary information towards increasing political support for the government. Using a descriptive study, the current study proposed to assess the efficiency of citizen participation on healthcare service delivery.

Berry et al. (2019), postulates that political culture influences public participation. They found that a strong motivation to achieve successful participation and ensuring that the participation process is devoid of partisan politics bring about a high level of public engagement. Their findings were given emphasis by Fagotto and Fung (2014)

who also established that public participation is successful when those who hold participatory meetings have political power and use their input to address citizens' needs through good performance. Further, Nabatchi and Amsler (2014) note that political culture may be affected by the degree of professionalism of elected officials and citizens' perception of the government. The above study is affirmed by the current study which sought to assess how community culture can affect the relationship between citizen participation and healthcare service delivery.

Gastil (2021), postulates that ensuring citizens feel they have an opportunity to contribute to the decision-making process calls for deliberative two-way communication oriented towards problem-solving. Such an approach would ensure that every participant has an equal chance to speak and listen to the views of other stakeholders. Amsler and Speers (2005), further argues that, meeting organizers should consider a communication style for assisting community participants to know the process. In reference to the above study, the current researcher sought to analyze the various levels and phases of citizen participation.

Gurney et.al (2021), in their investigation, established that citizenry is never given enough time to their views and there is no room for dialogue; thus, communication becomes a one-way process. In measuring the individual impact of public participation, Thibault et.al (2010), investigated 36 public meetings and hearings on highway proposals, noted that frequent participants showed more satisfaction and less frustration than those who did not participate. Further, Mohamud (2020), studied two public meetings and found that there was a high level of satisfaction among the participants and non-participants if they had high expectations of the meeting, thought that it would provide useful information and open discussions, and saw the conveners

as legitimate. In relation to public meetings of the above study, the researcher in the current study focused to investigate whether citizen participation is done in all phases of public participation.

In order to have fruitful public engagement, elected leaders, especially local legislators, should be responsive to public needs. Mohamud (2020), asserts that some government executives see public meetings as a way of ensuring that citizens actively participate in the democratic process, but only if the citizens are informed – since if they are not, they are likely do more harm than good. These findings are supported by Hagelskamp et al. (2013), who found out that elected officials see the public as being uninformed, disengaged and distrustful, and thus see no need to engage them. Well-structured deliberative public participation has been shown to produce high-quality engagements, especially in a diverse environment (Black, 2012), thereby reducing problems of marginalization, exclusion and inequality (Sui & Stanisevski, 2012). However, Shapiro and Murphy (2013) fear that such meetings may lead to group polarization, with one or both groups taking a hardline position. While there is evidence from research on polarization, it is limited to political discussions, and there is no empirical evidence on deliberative public engagement on socioeconomic issues (Collingwood & Reedy, 2012).

Efriandi et.al (2017) , conducted a descriptive survey research design using a sample of local governments in Kenya and Uganda to assess how local decision-making relates to citizen participation and accountability, established that local governments in Kenya had not involved citizens in decision-making, but that this was changing due to pressure from civil society and the introduction of the Local Authorities Transfer Fund. However, accountability problems persisted. As Efriandi used local government

as a sample, this present study uses household's heads as a sample. Furthermore, as Efriandi did the study in two countries, the current study was only done in Kenya.

Mugambi and Theuri (2014), conducted a study to analyze the challenges that County governments in Kenya face during budget preparation, using Kilifi County as a case study, they concluded that, even with the presence of budget procedures, the aspect of public participation was missing. Muriu (2014) also states service delivery in Kenya has had a positive impact due to citizen participation. He found out that public participation had been lacking and its influence on the decentralized system of government was negligible. Despite similarity with Mugambi and Theuri, the current study is different from that of Muriu who used a cross-sectional research design. As Muriu focused on assessing the impact of citizen participation, this study focused on assessing the effectiveness of citizen participation on healthcare service delivery.

Oduor et. al (2015), did a study to examine the status of citizen participation and the available information frameworks in Kenya's Counties through a qualitative study of Kisumu, Turkana, Makueni and Isiolo Counties. The study in Kisumu county found that decentralized structures for public participation were present to the grassroots level. Public gatherings were held through the help of members of the County Assembly (MCAs) and county officials. According to the study, when they took part in the organization of meetings, participants with differing views were excluded, indicating that they were not responsive to citizens' needs. The study found that public participation policy was missing leading to low participation in the meetings.

'Public meeting was held on a quarterly basis. The participants were allowed to select projects which would benefit them. However, such choices did not bind to the County executive decisions. Thus, the citizens' input did not influence the County's decision-

making process', Oduor et.al (2015). The scholar also noted that In Isiolo County, the public received information on predetermined projects that were to be initiated and thus there was no opportunity for citizens to engage with leaders on projects they felt were meaningful to them. Additionally, the County lacked mechanisms for civic education. All the above studies purely adopted the use of qualitative data and also relied on secondary data. This is in contrast with the present study which used both qualitative and quantitative data.

Kioko (2018), conducted a study on factors influencing participation in public finance in Makueni County, it was established that the County had organized its public education and engagement procedures. In addition, a Public Participation Office had been established to ensure that there was coordination and that the public was well informed so that it could participate effectively. Further, the County had trained 990 trainers on public participation from members of the community, mainly drawn from the religious fraternity, non-governmental organizations and the education sector especially the Teachers Association Union (Kioko, 2018). The scholar adopted a descriptive research design to get the views of the respondents. This is similar to the current study which also adopted a descriptive research design.

### **2.2.3 Efficiency of Citizen Participation on Healthcare Service Delivery.**

Global, strive to include citizens in decision making in health matters are well established considering a range of aspects in healthcare provision and public health (Kahssay & Oakley, 1999). This is evident in the report of the World Health Organization (WHO) that refers to engagement in the event of primary health care and public health. The need for person-centered care is central to the 1978 Declaration of Alma-Ata which states that People have a right and duty to participate individually

and collectively in the planning and implementation of their healthcare (WHO 1978). The need of the involvement of the public towards sustainable improvements in public health is supported in a number of WHO reports, including among others the Ottawa Charter (WHO 1986), Sundsvall Statement on Supportive Environments for Health (WHO 1991), and the efforts on key health issues including malaria (WHO 2002) and tuberculosis (TB) (WHO 2012).

The push to engage citizens in health care and policy involves them as members of the public. Wainright et.al (2014), differentiates between “patient involvement,” referring to “deciding on their own health” and “public involvement,” “members of the public being engaged in strategic decisions on healthcare services and policy. To them, patient involvement is essentially “private participation in which individuals promote and protect their own preferences and values. In the context of healthcare services and citizen involvement, there is need to “put aside personal preferences and participate for what is of common good” (Tenbenschel, 2010).

According to WHO (2012), social participation can be considered an innovative social practice that could be applied at all governance levels and in a variety of sectors. In summary, the public administration, is responsible for planning of participatory processes. However participatory processes can also be initiated by other social actors. This provides opportunities to facilitate increased participatory of citizens in social processes. This is especially relevant in the current institutional context of the WHO European Region, where degrees of development of democratic processes are very diverse in terms of civil liberties protection, levels of political participation,

pluralism, and balances on the exercise of government authority, free press and other basic democratic indicators.

Without social participation, it is impossible to achieve true health, especially in the areas of mental and social health cited in the WHO (2012) definition above. Social participation promotes a shared definition of well-being and supports the subjective identification of individuals with this definition. If social participation processes are inclusive – meaning that all of the population are entitled and have the skills to participate – social participation can be understood as a key driver of health equity (Mbithi et.al, (2019).

Waheduzzaman (2010), did a study to determine the effect of people participation on good governance in Bangladesh. The study sought to examine the setbacks to participation of the people within the local administration. The objective was to find the appropriate mechanisms for promoting the participation of citizens in the plans for development and governance. To get valuable responses for the research, qualitative method was used. The study found multiple setbacks that warranted low citizen participation. Some of the challenges included lack of awareness on matters healthcare management caused by insufficient structure for citizen participation. This present study used a mix of both qualitative and quantitative methods with an aim of seeking to understand the efficiency of citizen participation in Sirisia Subcounty Kenya.

Kabashome (2008), using a descriptive research design, conducted a study to determine how community participation influences sustainability of Water Supply



Projects of Kanungu and Kihhi Town Councils in Kanungu District of Tanzania. The objective of the study looked into analyzing the extent unto which community participation in problem identification, involvement, and decision-making. The results showed a minimal community participation that led to low success levels, as well as ownership and sustainability of the projects questions. The current study also used a descriptive research design but focused on the efficiency of citizen participation on healthcare service delivery in Sirisia, Kenya.

Musoke (2011) conducted a study in Uganda to analyze the peoples' participation level and its effect in the implementation of government projects between October 2000 and June 2003 using a cross sectional research design. This was in regards to improving essential services delivery so as to stimulate the development of the economic growth and alleviation of poverty, improve the local administrations institutional efficiency for sustainable, decentralized service delivery in accordance to the Government decentralization policy. The findings showed that people participation in the governance was highlighted as a means for enhancing the underprivileged ability in the countryside with purpose for poverty alleviation and promoting good leadership. The researcher in this present study has however used descriptive and correlational research designs to investigate the efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty, Kenya.

Mary (2009) conducted a descriptive research design study, to determine the factors hindering the participation of people in coming up with the development plans for the local administration in Nsangi Subcounty in Wakiso region of Uganda. The results revealed that where the local residents at the community level are drawn in the

classification of projects of main concern by incorporating their suggestions, they are normally dissatisfied as their much-preferred projects are in most instances not applied and the society in general does not participate in the execution, supervision and assessment of such projects. It also indicated that community involvement in planning process is least in matters project execution, logistics, and the carrying out of meetings with narrow awareness. The current study used both descriptive and correlational research designs to assess the relationship between efficiency of citizen participation and healthcare service delivery.

Kugonza and Mukobi (2016), conducted a study to ascertain community involvement in the provision of project services in Buikwe district local administration in Uganda. The study used a causal comparative research design and identified three major issues that affect the involvement of the public in local leadership right to use information, capability to involve the information successfully, and the awareness of the rights and responsibilities of the citizens, The study purely employed qualitative method of data analysis. The study findings indicated that these issues had a positive effect on the general involvement of the respondents in community administration projects by 10.2%, 19% and 22% as calculated by the help of coefficients of Pearson Correlation. Moreover, the results indicated that information is not easily available for efficient distribution to most of the people and hence it is not completely utilized for setting up, supervision and assessment of administration projects. This immediate study however adopted a mixed method of both qualitative and quantitative analysis, by the aid of a descriptive survey research design.

Ngondo (2014), conducted a survey research design study to investigate the effect of the participation of the society in project running activities, as a catalyst for the completion of constituency development funds (CDF) project within the stipulated time in Kanyekini ward in Kirinyaga central. The findings showed that project recipients had not been directly involved in either of the CDF projects operation teams throughout the CDF projects setting and execution, nonetheless, wherever inclusion happened, their contributions were considered and that the limits of completion were realized to rally round the calendar, aspect of integrity and financial plan. As opposed to the above scholar, the current scholar adopts a descriptive research design to assess the impact of the independent variable to the dependent variable.

Papa's (2016) study focused on the issues affecting the participation of community in the development of projects in Busia County Kenya, with the aid of descriptive research design and mixed approach of data analysis methods. The core purpose for the study looked into examining the effect of training and governance on the community participation in the project developments in the county of Busia. The findings indicated that Busia County leadership practices weak decision making process by not considering public participation; for carrying out proper public participation. Additionally, respondents mentioned the inadequate democratic social networks and gender inclusion techniques towards designing of public participation program(s). Despite similarity in the research design and data analysis method, the current study focused on the effectiveness of citizen participation on healthcare service delivery in Sirisia Subcounty, Kenya.

### **2.3 Summary and gaps in Literature Review**

Brazil introduced a new constitution in 1988 that made access to health a basic right and also introduced a unified health system for all. Devolution changed health model from a privatized system to a state system with the private sector only supplementing the States. Municipal authorities were mandated with health delivery and they were to ensure that health was accessible to all. Primary and secondary healthcare were provided by state through public and private health facilities. By year 2012, 54.8 % of the population was covered, which was a manifestation of healthcare coverage. Devolution led to expansion of community and public health centers which greatly improved health outcomes across the country. The scholar did this study outside Kenya and majored on devolution in general rather than citizen participation which is a specific item of the current study.

Ethiopia also introduced the concept of devolution in 1996 as plan to improve the provision of medical care in the nation. Regional levels were the first devolution recipients and later it was extended to the district levels in year 2002. Districts received grants from regional level authorities. The above study by Dubusho, was also conducted outside Kenya. It also concentrated on devolution rather than citizen participation. The current study therefore sought to fill this gap by doing the study here in Kenya and also with specific regard to citizen participation which is a component of devolution.

Additionally, KIPPRA report of 2018 on assessment of healthcare delivery in Kenya under devolved system emphasized that, there was significant improvement in the health sector performance. The report found that there is improved child survival for the last five decades, having a reduction of under-five, the infant, neonatal and maternal mortality. The nutrition status of children also improved. There was also a

significant decline in communicable disease and the HIV prevalence. However, the report by KIPPRA did not underscore the extent to which efficiency of citizen participation had been achieved hence the need for the current study. The KIPPRA report did a general study across the country without specific interest in a given county government, which this current study seeks to give emphasis by focusing on Sirisia Subcounty in Bungoma County.

Furthermore, another scholar by the name Mbithi measured institutional determinants of public participation by examining gubernatorial performance and vested power. He contended that a good institutional indicator of public participation lies in the Governor's performance and willingness to place certain legislative powers and support mechanisms that would lead to improved public participation initiatives within their jurisdictions. He further placed emphasis on the leadership role of the governor in achieving success of projects in the county government rather than considering the role of citizen participation, which this current study is dwelling on. Herina on the other hand argues that such professionalism on the part of the Governor may lead to professionalism in local institutions and hence to more open public participation hence the need for this study.

Kubai conducted a study about devolution in Meru County in the health sector and found out that healthcare service delivery had improved in terms of affordability, availability and accessibility to the common citizen. The study also revealed that devolution was being implemented in the correct manner though facing some challenges such as corruption, nepotism, inadequate funds and delayed salaries. The study further established that there is need for counties to work hand in hand with the National Government to ensure resources benefit the larger majority in counties. The

study by Kubai sought to assess the effect of devolution in general, on healthcare service delivery unlike the current study which concentrated specifically on assessing how an aspect of devolution (citizen participation) can be efficient in the healthcare service delivery.

Finally, a study by Papa focused on the issues affecting the participation of community in the development of projects in Busia County Kenya. The main purpose for the study was to examine the effect of training, governance and economic issues on the participation of community in the development of projects in Busia County. The results indicated that Busia County leadership does not demonstrates effective public participation; the acknowledging of key persons, which is necessary for managing aspects of public participation. Additionally, the aspect of participation showed inadequate democratic social networks and weak gender inclusion techniques in designing public participation program(s). It proved that the level of income had significant influence in participation process. His study focused on other issues affecting community participation and therefore did not concentrate on the concept of citizen participation on healthcare. This is why the current study proposed to fill this gap.

The main gap here is in relation to the use of different methods of data collection and analysis, research sites and time span, as compared to the present study. Additionally, there was dearth of information to explain why there was still poor healthcare service delivery in some parts of Kenya despite provision of citizen participation which was aimed at improving the healthcare sector in the country. The present study therefore focused on analyzing the effectiveness of citizen participation on healthcare service delivery in Sirisia Subcounty of Bungoma County here in Kenya.

## **2.4 Theoretical Review**

This study was guided by empowerment theory.

### **2.4.1 Empowerment Theory**

This theory was developed by Lydia Rappaport in 1987. The main tenet of this theory is that the gate-pass towards attaining community goals was through empowering the people to ensure that they are in charge of their own problems and they can influence the direction of their development process. To the scholar, empowerment is a force behind attaining long lasting control, skills, methods and understanding given problems in the society. Healthcare is one of the most important social issues that require long lasting solutions to the problems it faces. Citizens need to be made part of the process in the healthcare service delivery so as to attain the primary goals of healthcare sector.

This theory can be applied in different development initiatives through the action of working together with the community for maximization of their potential and realization of sustainable change. Community empowerment also enables people to identify power structures that are responsible for providing solutions ranging from an individual, community to policy level (Power, 2008). The new 2010 Kenyan constitution in its article 118, gives room for citizens to take part in public participation hence citizen participation. Citizen participation is a form of community empowerment as it gives an opportunity to citizens to take part in managing their affairs, including healthcare, at the county level. This has made the healthcare system pulley rather than pushy as it was before the new constitution was adopted.

The development of healthcare system has majorly depended on the effort put by citizens at various levels of their participation. Efficiency of citizen participation has really enhanced efficiency in healthcare service delivery. This has seen improvements in matters of infrastructure, equipment, medical personnel and generally, healthcare provision at the county level. Healthcare service delivery, being the dependent variable of the study, depends on the efficiency of citizen participation which is the independent variable of the study, which in turn, entirely depends on how citizens at the county levels are empowered to perform the role of decision making. This theory guided the study by explaining the role of citizen participation in promoting effective and efficient healthcare service delivery in Sirisia Subcounty, Bungoma County, Kenya.

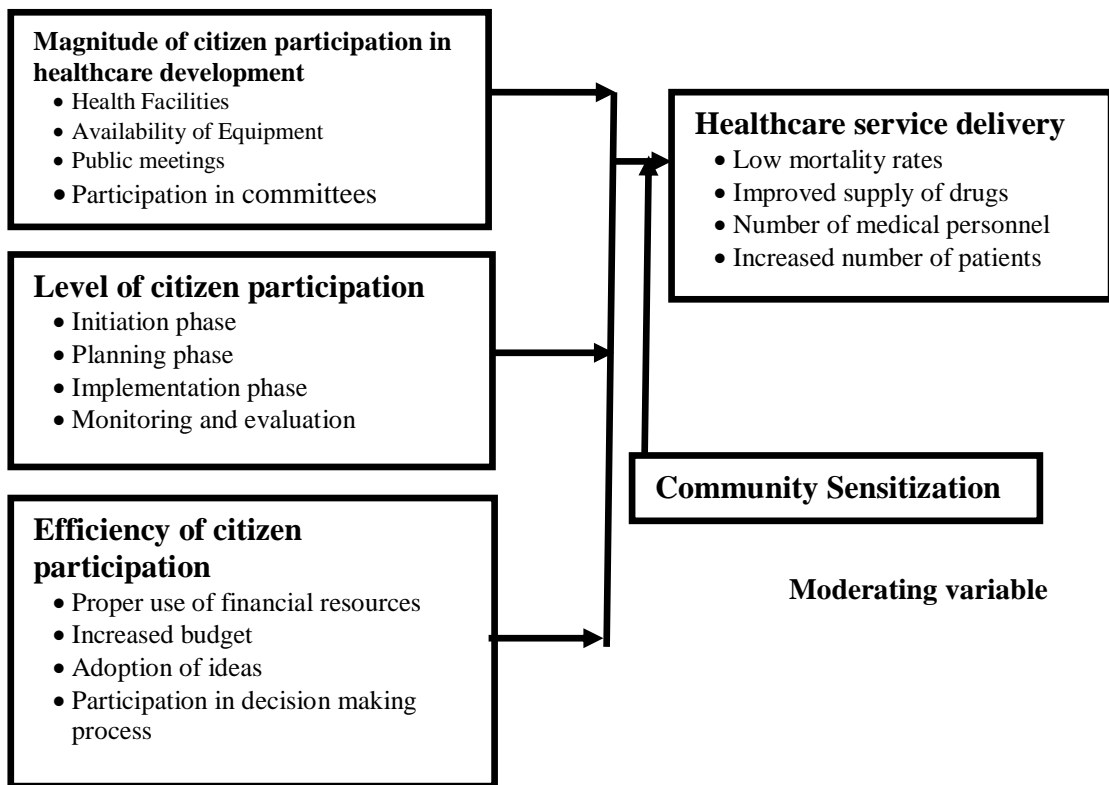
## **2.5 Conceptual framework**

This study was conceptualized to conceptualize the effectiveness of citizen participation on healthcare service delivery in Sirisia Subcounty of Bungoma County. The independent variables are magnitude of citizen participation in healthcare development, level of citizen participation and efficiency of citizen participation while the dependent variable is healthcare service delivery in Sirisia Subcounty. Furthermore, Community Sensitization serves as the moderating variable between the main variables of the study.



## Independent variables

## Dependent variable



**Figure 2.1: Conceptual Framework**

**Source: Researcher 2021**

The above conceptual framework indicates the relationship between independent and dependent variables. The independent variable is effectiveness of citizen participation while the dependent variable is healthcare service delivery. It shows that there is a direct link between citizen participation and healthcare service delivery. Development of healthcare services, level of citizen participation and efficiency of citizen participation, have implication on healthcare service delivery. Furthermore, Community Sensitization is a moderating variable, which serves as a nexus between independent and the dependent variables.

Community sensitization plays a significant role in determining the effectiveness of citizen participation on healthcare service delivery. With proper awareness created in the community, there will be proper participation of people in the healthcare system.

Furthermore, community sensitization helps to educate the public on matters regarding healthcare. By so doing, some of the cultural beliefs that bar the community from assessing medical services are gotten rid of. Conclusively therefore, community sensitization is like a catalyst which can be used to promote effectiveness of the healthcare sector not only in the study area, but also nationally and internationally.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the research methodology that was employed by the study. The focus of the chapter is to describe the research site, research design, target population, sample and sampling procedures, research instruments, data collection and analysis procedures, and ethical consideration.

#### **3.2 Site Description**

Sirisia is one of the Sub Counties in Bungoma County. It is made up of three wards namely; Malakisi, Lwandanyi and Namwela. According to the 2019 census, Sirisia Subcounty has a population of 102422 with an average of 5.8 people per household. The Subcounty has 17 healthcare facilities and 107 healthcare workers distributed amongst the facilities. Life expectancy is at 56 years with an infant mortality rate of 43.1 per every 1000 live births whereas the under 5 years' mortality rate is at 83 per every 1000. The bed occupancy is 115 per cent with a nurse-patient ratio of 1:1000 (DHIS, 2019), against the 1:400 recommendation of the World Health Organization. Refer to Appendices I, and II, for the maps of Sirisia subcounty, Bungoma County in Kenya and Kenya in Africa maps respectively.

#### **3.3 Research Design**

The study used both descriptive and correlational research designs. Descriptive studies are observational and qualitative in nature and they seek to establish the effect of the independent variables on the dependent one, by considering data from various entities (Kothari, 2019). Descriptive design was appropriate because the researcher collected and recorded information based on their views and opinion without

manipulating the variables. Descriptive research design entails collecting data that describes a phenomenon. It helps to address five critical research questions of what, how, when, who and where (Mugenda & Mugenda, 2012). Descriptive research was used to provide a picture of the effect of citizen participation on healthcare service delivery in the Subcounty.

Correlational research design was used to establish relationship between variables of the study hence the use Pearson's correlation analysis. Furthermore, inferential statistics of Regression analysis and ANOVA was used to determine the effect of the independent variable on the dependent variable. Inferential statistics were further used to make conclusions about the population using the data gathered from a representative sample.

### **3.4 Target Population**

The study targeted 17659 households in Sirisia Subcounty to collect the views and opinions of the citizens regarding their participation in decision involving health sector in Sirisia Subcounty generally. It also targeted 107 healthcare workers who were used as key informants in the study since they have a proper understanding of the concept of health service operations in relation to the shift from centralization to devolution. This helped in the triangulation process of the results under study.

This study focused on Sirisia Subcounty, which is one of the sub-Counties in Bungoma County. The choice of the Subcounty is because it is one of the remote areas of Bungoma County hence the need to assess the trickle-down effect of devolution in relation to citizen participation. Another reason is in relation to the fact

that the Subcounty has got indicators of poor healthcare service delivery as noted by the Bungoma County District Health Information System. This is evident by very high bed occupancy and high child mortality rate as depicted in the DHIS report. The subcounty has 17 health facilities where 14 are public while others are private and faith-based, serving a population of 102,422. The total number of healthcare workers in the subcounty is approximately 107. The number of households as per the Wards is presented in table 3.1 as follows;

**Table 3.1: Target Population**

<b>Name of the Ward</b>	<b>Target Population</b>
Namwela	4751
Malakisi	6046
Lwandanyi	6862
<b>Total</b>	<b>17659</b>

### 3.5 Sample size and Sampling Procedure

To determine the sample for the households, the required sample size was obtained using the Krejcie and Morgan (1970) formula. Thus,

$$n = \frac{\chi^2 \times N \times P(1-P)}{(ME^2 \times (N-1)) + (\chi^2 \times P \times (1-P))}$$

Where;

$n$  = sample size

$\chi^2$  = chi-square for the specified confidence level at 1 degree of freedom = (3.841) from tables

$N$  = population size

$P$  = population proportion (0.50 in the table)

ME = desired margin of error (expressed as a proportion =0 .05)

For the households it will be as follows;

$$\begin{aligned} n &= 3.841 \times 17659 \times 0.5 \times 0.5 \\ & \quad 0.05^2 \times (17659-1) + 3.841 \times 0.5 \times 0.5 \\ &= 376 \text{ households} \end{aligned}$$

Using the formula, the sample size for the target population of the study was 376 households. The sample size of 376 households and 32 healthcare workers was used in the study. The usage of 32 healthcare workers is in line with Mugenda and Mugenda (2012), who noted that for populations of less than 1000; a sample size of between 10%-30% is used. This study used 30% to derive the sample of 32 healthcare workers as proposed by Mugenda & Mugenda (2012).

Both cluster and purposive sampling were used to select the sample of the respondents who participated in the study. Powell and Connaway, (2004) indicated that in cluster sampling, the accessible population is classified into various natural groupings to represent the different groups from which the sample will be drawn from. In this study, the clusters are the three wards of the Subcounty. Simple random sampling was finally adopted to select the respondents that participated in the study from the three wards. Purposive sampling was applied to select the healthcare workers who took part in the study. The healthcare workers were purposively selected based on the fact that they had adequate knowledge about the operation of the healthcare system right from the time devolution of healthcare system had not been adopted. The samples of the Wards were calculated through proportional allocation. This is as elaborated in table 3.2 below,

**Table 3.2: Sample for the Study**

<b>Name of the Ward</b>	<b>Target Population (Households)</b>	<b>Sample</b>
Namwela	4751	101
Malakisi	6046	129
Lwandanyi	6862	146
<b>Total</b>	<b>17659</b>	<b>376</b>

### **3.6 Data Collection Instruments and procedures**

Both primary and secondary data was considered for this study. Primary data was collected by use of questionnaires and interview guides. The researcher developed questionnaires and interview schedules addressing key areas of the study based on the objectives. Secondary data on the other hand consisted of literature review sources and data checklists that were crosschecked to corroborate the primary data obtained from the field.

#### **3.6.1 Questionnaire**

Questionnaires are usually preferred for a study where the participants are dispersed in a wider area, they are very easy to administer and analyse. They are also economical in terms of resources since the respondents will be required to fill them in at their own convenient time (Mugenda & Mugenda, 2012). The level of confidentiality is assured, as the researcher is not exposed to the respondents. However, the accuracy of the data is a big challenge because some respondents may decide not to participate or withdraw from the study.

The questionnaires were administered to the selected household heads. The questionnaire comprised of sections A and B. Section 'A' contained items seeking personal information pertaining to the age, gender, work experience, and academic qualifications of the participants. Section 'B' contained items on specific issues in line with the research objectives. The respondents were requested to indicate their opinions on a 5-point rating scale. Refer to Appendix IV for further clarification.

### **3.6.2 Interview Guide**

Interview guides comprised of open-ended questions geared towards gathering in-depth understanding of varied information on the topic of study as understood by key informants. They were administered to the healthcare workers. The interviews were guided by lead questions formulated from the objectives of the study to guide the study; while the researcher controlling the discussion to make sure that the respondents do not go out of the topic of discussion. Probing was done where necessary to ensure that the respondents gave adequate information required. Refer to appendix V.

### **3.7 Piloting of the Research Instruments**

The pilot study was conducted in Kopsiro Subcounty; Kapkateny and Chepyuk wards of Mount Elgon constituency since the main study was conducted in Sirisia Subcounty. The number of households piloted were 38, which represents 10% of the sample for the main study. Four (4) healthcare staff were piloted. This was in line with the suggestions of Connelly (2008), and Mugenda and Mugenda (2012) who suggest that a pilot study sample should be between 1-10 percent of the sample projected for the actual study. This guided the choice of 38 and 4 respondents respectively, for the pilot study. All deficiencies in the study instruments were identified and corrected after conducting the pilot. The researcher also rephrased the items that were considered ambiguous in order to enhance the validity of the instrument. This helped to streamline research instruments before the actual study.



### **3.8 Validity of the Research Instruments**

In order to assess the ability of the instrument to measure what it is supposed to measure, validity was tested. According to Mugenda and Mugenda (2012), a research instrument is said to be valid if it measures what it was supposed to measure. For this study, both face and content validity were tested. Face validity measured the extent to which the instrument generated the required data. Content validity on the other hand examined the content of the constructed questionnaires. Using Amin (2005) Coefficient Validity Index formula, the validity was determined as shown below.

CVI = Number of items with same response

$$\begin{aligned} & \text{Total number of items on the questionnaire} \\ & = 19/25 \\ & = 0.76 \end{aligned}$$

According to Amin (2005), a research instrument is said to be valid if the CVI is 0.6 and above. For this study the validity was computed and the results showed that the respondents agreed on 19 items out of the 25 and hence the validity index was 0.76 indicating that the questionnaire was valid. This was further confirmed by computing a Kaiser-Meyer-Olkin Measure of Sampling Adequacy test using factor analysis where the results indicated a factor of 0.72. This implies that the questionnaire was valid and hence appropriate for use in the study.

### **3.9 Reliability of the Research Instruments**

The ability of a research instrument to give similar results after repeat trials on the same or on different samples selected from the same population is referred to as reliability (Orodho, 2009). The researcher used test-retest method to measure the reliability of the questionnaire. A group of respondents of the same characteristics

with the subjects of the study were selected for this purpose. The questionnaires were administered to the respondents within an interval of one week and the response from the two tests analysed.

The two sets of responses were correlated using Pearson's Product Moment Formula to calculate the co-efficient of correlation in order to establish the extent to which the contents of the questionnaires are consistent in eliciting same responses. A correlation coefficient ( $r$ ) of more than 0.7 was to be considered appropriate for this study. According to Kothari (2019), a reliability coefficient of 0.7 and above is considered appropriate for use in a descriptive study. For this study the reliability coefficient was computed using SPSS Version 26 and the results showed an alpha reliability coefficient of 0.83 for the 25 items of the questionnaire.

### **3.10 Data Collection Procedure**

The researcher requested for an introduction letter from the Board of Post Graduate studies of Maasai Mara University and also made an application to the National Commission of Science, Technology and Innovation (NACOSTI) for the research permit. Furthermore, other approvals were sought from the relevant county and Subcounty offices and departments. By the help of the research assistants, the researcher delivered the questionnaires to the selected participants after establishing contacts and creating rapport with the targeted respondents. The researcher agreed with the respondents on the most convenient duration of time after which the completed questionnaires were collected back. The interview guides were also scheduled on the agreed dates and time in consultation with the respondents.

### **3.11 Data Analysis and Presentation**

Quantitative and qualitative data analysis techniques were adopted for the study. Data analysis begun by the researcher checking for completeness and the accuracy of the

responses given on the questionnaires as well as the uniformity of interpretation of the questionnaire items. This enabled the researcher to draw a proper compilation and coding of data for analysis. Those questionnaires, which were not complete were discarded. All the complete questionnaires were coded by assigning numerals to the responses for entry into the system for analysis.

Qualitative data analysis was done to capture the findings of the key informants. This began with transcribing the recordings of the key informants and coding them appropriately. All the recorded interviews were transcribed and coded from the first to the last interviewee that is; 1 to 32. The codes were assigned identities of healthcare workers (HCW), ranging from HCW001 to HCW032.

Quantitative data analysis on the other hand involved calculation of frequencies and averages, which were used to summarize the responses alongside the main variables of the study. Further analyses were built on the initial findings, seeking patterns and relationships in the data by use of correlation analysis of the spearman`s rank. Correlation helped to establish the relationships between the variables while Regression analysis was done in order to establish the effect of relationship between variables. ANOVA was used to establish whether the null hypothesis would be accepted or rejected in the study. This was done with the help of Statistical Package for Social Sciences (SPSS) (Version 26). The results were presented by use of figures such as tables, charts and graphs.

### 3.12. Test of Hypothesis

The study sought to test the hypotheses as described in table 3.3

**Table 3.3: Test of Hypotheses**

Null Hypothesis	Variables /indicator	Analysis	Test result
There is no significant relationship between magnitude of citizen participation in development of healthcare service and healthcare service delivery in Sirisia subcounty.	-Magnitude of citizen in development of healthcare service	Descriptive analysis, Pearson correlation(R), regression analysis, ANOVA	The null hypothesis was accepted if the p-value >0.05, and F calculate < F critical
There is no significant relationship between the level of citizen participation and healthcare service delivery in Sirisia Subcounty.	-Level of citizen participation and healthcare service delivery	Descriptive analysis, Pearson correlation (R), regression analysis, ANOVA	The null hypothesis was accepted if the p-value >0.05, and F calculate < F critical
There is no significant relationship between the efficiency of citizen participation and healthcare service delivery in Sirisia Subcounty.	-Efficiency of citizen participation and healthcare service delivery	Descriptive analysis, Pearson correlation (R), regression analysis, ANOVA	The null hypothesis was accepted if the p-value >0.05, and F calculate < F critical

The study further developed both the simple linear regression model and the multiple regression models;

The regression models are expressed as shown below;

$$y = \beta_0 + \beta x + e \text{ (Simple linear regression model)}$$

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e \text{ (Multiple linear regression model)}$$

Where Y is the dependent variable, which represents delivery of healthcare services

$\beta_0$  Represents the constant

$x_1$  Represents Magnitude of citizen participation in the Development of Healthcare Service

$x_2$  Represents Level of Citizen Participation

$x_3$  Represents Efficiency of Citizen Participation.

$e$  Represents the Error Term

*B1, B2 and B3* (Represents coefficients of determination for the regression analysis).

Statistical Packages for Social Science (SPSS Version 26) was used to assist in the analysis for all the research objectives. The study's quantitative results were presented using tables, pie charts and graphs while qualitative findings were presented in thematic and narrative form.

### **3.13 Ethical Considerations**

The major ethical issue in this study was privacy and confidentiality of the respondents. Confidentiality was maintained throughout the research for the sake of the respondents. The identity of the respondents was kept confidential. The respondent's participation also remained voluntarily. The purpose of the study was clearly explained to the respondents in the questionnaire. The research was carried out for academic purposes. Openness and honesty were exercised throughout the study. The findings of the study were interpreted honestly and objectively and the statistical procedures applied without concern for a favorable outcome. The findings of the study will be made public by providing a copy of the thesis to the university library where students and members of the public will be able to access and read. Copies of the thesis will also be deposited to NACOSTI and the records department of Bungoma County.

## CHAPTER FOUR

### RESEARCH FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

The findings of the study are presented in this chapter based on the data available from the field survey. The chapter presents the analysis to indicate whether the response rate was adequate for further analysis. Excel sheet and SPSS version 26 was used as the main tool for data analysis, where the means, frequencies and percentages were computed. The research further used Microsoft excel software to create and present descriptive data. Descriptive statistics were used to summarize the demographic data of the samples and their characteristics. Inferential statistics, that is Pearson's correlation, Analysis of variance and multiple regressions were used to explore the relationship between the independent and the dependent variables. The multiple regression assumptions were also tested, normality was tested using skewness where values between +1.96 and -1.96 indicated that the data was normally distributed (Doane & Seward, 2011).

Furthermore, thematic analysis of qualitative data was done to capture the findings of the key informants. This begun with transcribing the recordings of the key informants and coding them appropriately. All the recorded interviews were transcribed and coded from the first to the last interviewee that is; 1 to 32. The codes were assigned identities of healthcare workers (HCW), ranging from HCW001 to HCW032. Their opinions were embedded to corroborate the quantitative data, as indicated in the analysis of the descriptive statistics section. The main issues of concern here were based on the three independent variables which were magnitude of citizen participation in the development of healthcare, level of citizen participation and

efficiency of citizen participation.

## 4.2. Findings of the Study

### 4.2.1 Response rate

The study targeted a total of 376 respondents from among the households in Sirisia Subcounty of Bungoma County. Members from the households aged eighteen years and above were considered for the study. The results are presented in table 4.1.

**Table 4.1: Response Rate**

<b>Response</b>	<b>Distributed</b>	<b>Returned</b>	<b>Non response</b>
Number of questionnaires	376	301	75
<b>Percentage %</b>	<b>100</b>	<b>80.05%</b>	<b>19.95%</b>

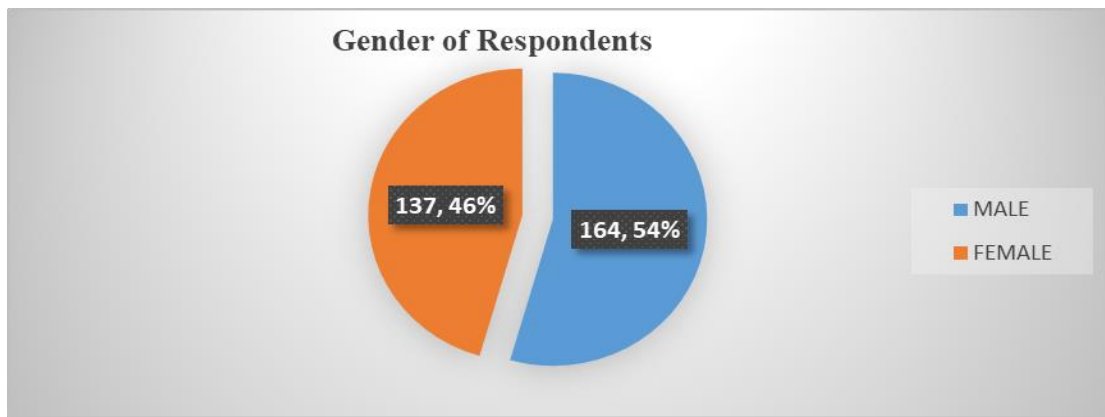
A total of 301 out of 376 questionnaires were returned, screened for completeness and coded for analysis. This represented 80.05% response rate and was considered adequate for use in the analysis process. The 19.95% of the questionnaires were not returned and this was contributed to, by the fact that during the time of data collection, there was no responsible person at the household to fill the questionnaires even after making follow ups. It was also noted that some of the questionnaires were not filled to the end hence they were discarded and not considered for the study.

Others were not collected back completely because the respondents could not be traced during the time of collection. Furthermore, key informant interviews were conducted in the Subcounty and all the 32 officers that were targeted were interviewed. The response rate for key informants was 100% since they were not many and data could be collected from them face to face in less than 1 hour per person. The results were in agreement with Kothari (2019), who established that a response rate for a field survey of above 70% is appropriate for use in data analysis.

### 4.3 Demographic Factors

According to Lunning (2021), demographic analysis is the collection and analysis of broad characteristics about groups of people and populations. This study sought to establish response about the demographic factors of the respondents. Among the demographic factors that were analyzed are gender and age distribution of the respondents, educational levels of the respondents and the number of years they had lived in the study area.

#### 4.3.1. Gender of the Respondents



**Figure 4.1: Gender of the Respondents**

Gender is a very important aspect of the household (Alawode et al., 2020). In this study, it was very important to understand the distribution of the gender as it has an influence on the household well-being. In regard to gender of the respondents, the study sought to establish the distribution of male and female respondents who participated in the study. Gender has an influence on health issues at the household in any country because the males may have different perspective on the issue of health from that of females. The response is presented in figure 4.1. The results show that there were more male respondents than female respondents who participated in the study. From the figure above, 54% of the respondents were male while 46% were



female. These results represent scenarios from male dominated communities where men are key decision makers in the family and hence are given first priority when it comes to any issue that involves the household including health.

#### 4.3.2 Age of respondents

The study sought to analyze the age of respondents since it is a very important component in analyzing the trends that people have studied over time in relation to healthcare service delivery in Sirisia Subcounty of Bungoma County, Kenya. The study considered residents of Sirisia sub- County who are 18 years and above. The results are presented in table 4.2 below.

**Table 4.2: Age of the respondents**

	<b>Frequency</b>	<b>Percent</b>
18 -25 years	84	27.9
26-35 years	126	41.9
36-45 years	50	16.6
46-59 years	24	8.0
Above 60 years	17	5.6
<b>Total</b>	<b>301</b>	<b>100</b>

The results show that 41.9% of the respondents who participated in the study were aged between 26-35 years followed by 27.9% who were aged between 18 and 25 years. It was further established that 16.6% were aged between 36-45years while 8% were aged between 46-59 years. Those who were above 60 years of age were 5.6% of the respondents. This implies that most respondents were in their adult age of 26-35 years and participated actively in healthcare matters of their families hence they can be considered to have knowledge on healthcare in the study area.

#### 4.3.3 Educational level of Respondents

The study also sought to establish the level of education of the respondents who took part in this study from Sirisia Subcounty, Kenya. This factor was important to this study because of the presumption that the level of education gives a person the

opportunity to make appropriate decisions on how to manage a particular situation. Furthermore, education is important since it promotes creativity and innovation in a person. The results are presented in table 4.3 below.

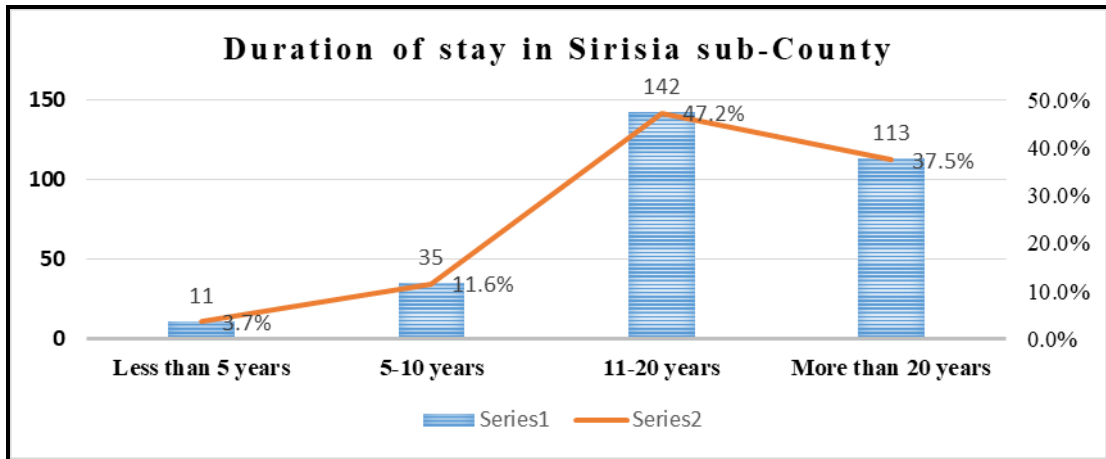
**Table 4.3: Educational level of Respondents**

	<b>Frequency</b>	<b>Percent</b>
None	4	1.3
Primary school	48	15.9
Secondary school	97	32.2
College	72	23.9
University	80	26.6
<b>Total</b>	<b>301</b>	<b>100.0</b>

From the results presented in table 4.3, it is established that 32.2% of the respondents had attained secondary level of education, 26.6 % had attained university education, and 23.9% had attained college education. Further, the analysis indicated that 15.9% of the respondents had attained primary education. 1.3% had not attained any level of education. This implies that most of the respondents had basic education, which they use in making appropriate decision related to matters healthcare. Alawode, Olaniran and Abegunde (2020), also established that education is key in enabling people to act rationally on issues affecting their lives including healthcare.

#### **4.3.4 Duration of stay in Sirisia Subcounty**

The study sought to further analyze the number of years that the respondents had lived in Sirisia Subcounty and their ability to articulate on the development of healthcare service delivery in the study area. Results are presented in figure 4.2 below.



**Figure 4.2: Duration of Stay in Sirisia Subcounty**

The study established that majority, (47.2%) of the respondents had stayed in Sirisia Subcounty between 11-20 years. Further, analysis revealed that 37.5% of the respondents had stayed in the Subcounty for more than 20 years while 11.6% of the respondents had stayed in the study area between 5-10 years. Only 3.7% of the respondents had stayed in the study area for less than 5 years. This implies that majority of the respondents had stayed in the study area for a relatively long period of time and therefore had knowledge about the healthcare system of the study area. This further assert that the respondents were better placed to give sufficient information about healthcare service delivery in the study area over time.

#### **4.4 Analysis of Descriptive statistics**

The study sought to address the following objectives; establishing the magnitude of citizen participation in the development of healthcare service in Sirisia Subcounty, examining the level of citizen participation on healthcare service delivery in Sirisia Subcounty and analyzing the efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty Kenya.

#### 4.4.1 Establishing the magnitude of citizen participation in the development of healthcare service in Sirisia Subcounty.

The first objective sought to establish the magnitude of citizen participation in the development of healthcare service in Sirisia Subcounty. The respondents were required to give their opinion on the various statements that described healthcare development on a Likert scale of 1-5. **Where; 1=Minimal Extent; 2 = Moderate extent; 3= Not sure; 4= Great extent; 5=Very great extent.** The results are presented in table 4.4. The results were summarized using percentages, mean and standard deviation.

**Table 4.4: Establishing the magnitude of citizen participation in the development of healthcare service in Sirisia Subcounty.**

Statement	Minimal Extent	Moderate Extent	Not Sure	Great Extent	Very Great Extent	Mean	S.D
In Sirisia Subcounty, health facilities have been developed as a result of healthcare development	3.0%	8.2%	3.0%	20.1%	65.7%	4.41	.988
Hospital equipment have been brought to Sirisia Subcounty as a result of healthcare development	10.0%	13.0%	14.2%	24.9%	33.9%	3.94	.864
Public meetings have been brought about by healthcare development in the Subcounty and this has promoted efficiency in healthcare service delivery in Sirisia	8.2%	9.7%	20.9%	29.9%	31.3%	3.64	1.331
Members of the public participated in healthcare development through public meetings and this has promoted efficiency of healthcare service delivery in Sirisia Subcounty	6.7%	6.0%	35.1%	26.1%	26.1%	3.54	1.091
There is improved healthcare development as a result of public participation in Sirisia Subcounty	7.3%	14.0%	21.9%	33.6%	23.3%	3.51	1.199
Public participation is necessary in promoting healthcare development in Sirisia Subcounty	7.0%	16.9%	23.3%	3.7%	49.2%	3.71	1.397

According to the results in table 4.4 above, 65.7% of respondents believe that in Sirisia Subcounty, health facilities have been developed because of healthcare

development initiative. A further 20.1% of the respondents indicate that in Sirisia Subcounty, health facilities have been developed because of healthcare development programs while 8.2% of the respondents disagreed with the statement above. A mean response of 4.41 and a standard deviation of 0.998 show that more than half of the respondents had agreed with the statement that health facilities had developed because of healthcare development programs in Sirisia Subcounty. This indicates that Sirisia Subcounty is improving in terms of healthcare service delivery because healthcare facilities have been developed by the Subcounty.

The findings of the study above were complimented by the verbatim from one of the healthcare workers coded HCW 011 whose view was as indicated below;

*“.... Indeed, there is tremendous development in the healthcare sector in the Subcounty as a result of healthcare development. In 2013, the healthcare bill regarding healthcare development was passed in order to allow that to happen. The bill encompasses what is called the Facility Improvement Fund which has promoted healthcare development in Sirisia Subcounty categorically and Bungoma County generally. These are the funds accrued through the services provided by the healthcare facilities. This has improved medical supplies and service delivery generally.”*

The above verbatim was also echoed by the healthcare workers HCW008, HCW013 and HCW018. They also highlighted that there is actually noticeable tremendous development in the healthcare sector in Sirisia Subcounty. From the above interviewees, it is noted that there are tremendous achievements in the development of healthcare in the Subcounty.

The results from both the households and key informants indicate that there was actually significant improvement in the healthcare sector as can be seen above. The findings are also in tandem with those of Kubai (2019) who established that healthcare

in Meru County had really improved in terms of availability, accessibility as well as affordability. However, it is important to note the doubt portrayed by the respondents who agreed to minimal extend and also those who were not sure about the development of the healthcare sector since devolution begun.

On whether hospital equipment have been brought to Sirisia Subcounty as a result of healthcare development, 33.9% of respondents strongly agreed while 24.9% agreed with the above statement. In addition to that, 14.2% of the respondents were not sure as to whether hospital equipment had been brought to Sirisia Subcounty because of healthcare development. A further 10% of the respondents strongly disagreed with the above statement while the rest of the respondents (13%) could not explain the extent to which they agree with the statement above. A mean of 3.94 with a standard deviation of 0.864 generally indicate that most of the respondents were aware that some equipment was bought to promote healthcare development in Sirisia Subcounty. However, the study still revealed that a considerable number of people were not sure as to whether hospital equipment has been bought or not.

The study also sought to examine whether public meetings have been brought about by healthcare development in the Subcounty and whether this has promoted efficiency in healthcare service delivery in Sirisia. The study established that 31.3% of the respondents were of the opinion that public meetings have been enhanced as a result of healthcare development in the Subcounty and this has promoted efficiency in healthcare service delivery in Sirisia. 29.9% of the respondents established that public meeting has been brought about by healthcare development in the Subcounty and this has promoted efficiency in healthcare service delivery in Sirisia by a great extent. However, 20.8% of the respondents were not sure as to whether public meetings have

been brought about by healthcare development in Sirisia Subcounty to promote healthcare service delivery.

The results above were complemented by the verbatim from healthcare worker coded HCW 002 who noted as follows;

*“.... Devolution has really helped in the grassroots health development... Majority of the achievements we have today could not have been possible were it not for devolution. However, there are some challenges that are marred with devolution but at least the status of it as at now is improving. One of the challenges is that politicians try to hijack some of these meetings for their own selfish gains and secondly inadequate financial resources has been a bottleneck in achieving the objective of public participation.”*

Furthermore, the views of the above healthcare worker were supported by some other interviewees including HCW022, HCW026 and HCW029, who acknowledged the indispensable role played by devolution in developing the healthcare sector. From the above set of information, it is clearly depicted that devolution has played an indispensable role in the healthcare sector since it was adopted in Kenya. The above information is further confirmed by the study findings of Dubusho (2009), who noted that Ethiopia introduced devolution so as to improve the condition of healthcare in the nation. It was however noted that devolution is faced by some challenges including corruption. This is why some people call devolution a decentralization of corruption.

The study further established that 26.1% of respondents were of the opinion that members of the public participated in healthcare development through public meetings and this has promoted efficiency of healthcare service delivery in Sirisia Subcounty to the greatest extent and great extent respectively. The results further establish that 35.1% of the respondents were not sure if members of the public participated in healthcare development through public meetings in Sirisia Subcounty. However, 6.7% of the respondents strongly disagreed that members of the public

participated in healthcare development through public meetings and this has promoted efficiency of healthcare service delivery in Sirisia Subcounty. This indicates respondents had mixed reactions on whether members of the public participated in healthcare development through public meetings and this has promoted efficiency of healthcare service delivery in Sirisia Subcounty.

The above results were complemented by the interview obtained from healthcare worker HCW 005 who said the following;

*“In order to boost public participation in Sirisia Subcounty, Community strategies have been introduced. A community-based approach has been introduced which encompasses the introduction of Community Health Workers (CHWs)/ Community Health Volunteers (CHVs) from various community units. Community units are areas that are directly served by a CHW/CHV. As a result of this strategy public participation has been improved on matters healthcare in the Subcounty. The Community plays a key role in this sector through the involvement of CHVs/ CHWs who are residents of Sirisia Subcounty”. The role played by the community health workers commonly known as CHWs, could not be taken for granted because they are the ones that link most patients to the health facilities.*

This was also noted by HCW010, HCW016 and HCW025. They too, echoed that public participation was mainly done by community representatives known as community health volunteers and community health extension officers. They are the ones that link the citizens with the healthcare facilities. This can be termed as partial involvement of citizens rather than complete involvement which should be realized.

On whether there is improved healthcare development because of public participation in Sirisia Subcounty, 33.6% and 23.3% of the respondents agreed and strongly agreed respectively. 21.9% of the respondents were not sure as to whether there is improved healthcare development because of public participation in Sirisia Subcounty. The results further established that 14% of the respondents were of the moderate opinion that there is improved healthcare development because of public participation in



Sirisia Subcounty. However, 7.3% of the respondents strongly disagreed as to whether there is improved healthcare development because of public participation in Sirisia Subcounty. This indicates that as much as a considerable number of people in the Subcounty are of the opinion that there is improved healthcare development as a result of public participation in Sirisia Subcounty, there is still a considerable number of the people who are not sure of the same developments.

Lastly, the study sought to analyze whether public participation is necessary in promoting healthcare development in Sirisia Subcounty. Results indicate that 49.2% agreed with the statement that public participation is necessary in promoting healthcare development in Sirisia Subcounty. Further analysis indicated that 23.3% of the respondents were not sure as to whether public participation is necessary in promoting healthcare development in Sirisia Subcounty. It was also established that 16.9% of the respondents disagreed with the statement while 7% of the respondents strongly disagreed with the statement above. This was the case simply because most of the respondents felt that public participation was not helping to improve the situation in Sirisia Subcounty because politicians use it to rubber stamp projects on residents.

Generally, on the development of healthcare in Sirisia, data from the interviewee HC 030 indicated as follows:

*“the growth of healthcare is important since it is a basis to realizing improved healthcare in the Subcounty and the County generally. In order to improve on the development of Healthcare in the Subcounty, public participation has really been of importance since it has been used as an avenue for sensitizing the public on issues of healthcare development.... Awareness campaigns have been done periodically through linkages with CHV/Ws in order to manage diseases like diabetes, Malaria, Cancer, Hypertension and other related healthcare problems. With the use of Community Health Extension Workers (CHEWs) and also Facility Health Extension Workers (FCHEWs), has helped*

*to ensure development of healthcare facilities and programs that are people oriented in the long run”*

The above opinion was also in tandem with the view of HCW024 and HCW028, who, both noted that extension officers have really assisted in doing linkage role between the community and the health facilities. As aforementioned, community health volunteers and extension officers have played a very important role in the development of healthcare through sensitizing members of the community on matters pertaining the same.

#### **4.4.2 Level of Citizen Participation on Healthcare Service Delivery in Sirisia subcounty.**

The second objective of the study sought to examine the level of citizen participation on healthcare service delivery in Sirisia Subcounty. The respondents were required to give their opinion regarding various statements that described level of citizen participation on a Likert scale of 1-5. **Where; 1=Minimal extent; 2 = Moderate extent; 3= Not sure; 4= Great extent; 5=Very great extent.** The respondents were rated according to mean, standard deviation and skewness. The outcome is as presented in table 4.5 below.

**Table 4.5: Level of Citizen Participation on Healthcare Service Delivery**

Statement	Minimal extent	Moderate extent	Not sure	Great extent	Very great extent	Mean	SD
Members of the public are involved in healthcare programs during initiation phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty	0	5.6%	7.3%	30.6%	46.6%	4.18	.913
Members of the public are involved in healthcare programs during planning phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty	4.7%	6.6%	15.6%	37.5%	33.6%	3.87	1.115
Sirisia Subcounty allows members of the public to be involved in healthcare programs during implementation phase and this has promoted efficiency in healthcare service delivery	3.3%	9.0%	30.6%	15.3%	41.1%	3.83	1.166
Members of the public are involved in healthcare programs during monitoring and evaluation and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty	8.0%	20.3%	16.6%	31.2%	23.9%	3.43	1.270
In Sirisia Subcounty, members of the public are involved in all the phases of healthcare programs and this has promoted efficiency in healthcare service delivery	2.0%	23.6%	34.9%	24.6%	15.0%	3.27	1.044
Level of participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty	6.6%	4.3%	18.3%	33.9%	36.9%	3.90	1.147

The study sought to examine whether members of the public are involved in healthcare programs during initiation phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty. The study established that 46.6% of the respondents were of the opinion that members of the public are involved in healthcare programs during initiation phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty to the greatest extent while 30.6% further agreed with the statement above to the great extent. 7.3% of the respondents were not sure as to whether members of the public are involved in healthcare programs during initiation phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty.

The results were supported by the verbatim form interviewee HCW001 who had this to say;

*“During the first phase, the community is gathered through the use of CHV/Ws who have to come and suggest the kind of projects they wish*

*should be initiated. Health is a technical issue that the community may not be able to understand the technical bit. However, we take their suggestions and align them to the mission and the vision of the county, then plan for implementation and finally monitoring and evaluation. Key aspects of community expectations are analyzed and siphoned in order to make informed decisions on which projects should be started”.*

The same sentiments were also echoed by HCW004 and HCW031, who said that public participation is majorly done through the use of CHWs/CHVs because they are the ones who have more knowledge on healthcare matters compared to other members of the community. Another thing that is coming out clearly here is the aspect of representative participation in which citizens do not get an opportunity to directly take part in the decision-making process. Also, most of them do not get a chance to participate in all the phases of participation as required. This may tantamount to some kind of discrimination in the process. The verbatim however sanitizes the allegation on the ground that citizens may not be in a position to give out information on technical issues concerning healthcare.

On whether members of the public are involved in healthcare programs during planning phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty, the study established that 37.5% of the respondents agreed to the statement to the great extent. A further 33.6% of the respondents were of the opinion that members of the public are involved in healthcare programs during planning phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty. However, 15.6% of the respondents were not sure as to whether members of the public are involved in healthcare programs during planning phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty. This indicates that members of the public in Sirisia Subcounty have been involved in the planning phase and this has promoted efficiency in

healthcare service delivery in Sirisia Subcounty. This was supported by the mean of 4.18 and a standard deviation of 0.913 indicating the level of agreement on the statement above.

On whether Sirisia Subcounty allows members of the public to be involved in healthcare programs during implementation phase and this has promoted efficiency in healthcare service delivery, results indicate that 41.1% of the members strongly agree with the statement. However, 30.6% of respondents are not sure as to whether Sirisia Subcounty allows members of the public to be involved in healthcare programs during implementation phase and this has promoted efficiency in healthcare service delivery. Further analysis indicates that 15.3% of respondents agree with the statement that Sirisia Subcounty allows members of the public to be involved in healthcare programs during implementation phase and this has promoted efficiency in healthcare service delivery. These results indicate mixed opinions of the above statement showing that members are divided on whether Sirisia Subcounty allows members of the public to be involved in healthcare programs during implementation phase and this has promoted efficiency in healthcare service delivery. This is a clear indication that mostly, public participation is not taken into consideration during implementation stage of health programs in the Subcounty.

Results further indicate that 31.2% of the respondents are of the opinion that members of the public are involved in healthcare programs during monitoring and evaluation and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty to the great extent. Further analysis shows that 23.9% of respondents were of the opinion that members of the public are involved in healthcare programs during monitoring and evaluation and this has promoted efficiency in healthcare service delivery in Sirisia

Subcounty to the greatest extent. However, 16.6% of respondents were not sure of the statement. Also, further analysis shows that 20.3% and 8% of respondents disagreed and strongly disagreed respectively with the statement. This implies that although a number of respondents agree that members of the public are involved in healthcare programs in the Subcounty, still, there is a good number who are not involved in these programs during monitoring and evaluation phase.

These findings were backed up by the views of the healthcare worker coded HCW023 who said the following;

*“.....In many cases, monitoring and evaluation is done through CHVs or by the county officials themselves. Communities are involved in this aspect by providing key information regarding the extent to which they are satisfied with projects regarding healthcare. In many cases, the County government does not provide feedback to the community regarding the same...Most of the time we have decided to use CHV/Ws to get key information for the community. In addition ... devolution has promoted strategies that have enabled the community to mitigate stereotypic cultural practices that have been inhibiting citizen participation into these key stages of development of healthcare programs in the Subcounty.”*

The above verbatim relates to the study that was conducted by Papa in Busia County in the year 2010 who established that there was need to work out on the issues hindering participation of people in healthcare issues. Papa singled out weak decision-making base as one of such factors. In Sirisia Subcounty, 34.9% of the respondents were not sure if members of the public are involved in all the phases of healthcare programs and this had promoted efficiency in healthcare service delivery. Further analysis revealed that 24.6% of the respondents agreed with the statement above while 23.6% disagreed with the statement above. In addition to that, the study also established that 15% of the respondents strongly agreed with the statement above. From the analysis, it is evident that most of the respondents disagreed with the

statement above implying that public participation is not implemented in all the cycles related to implementation of health programs in Sirisia Subcounty.

The results also show that the level of participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty. 33.6% and 36.9% of the respondents agreed with the statement at a great extent and a very great extent respectively. Further analysis indicates that 18.3% were not sure of the statement above. This level of agreement is supported by a mean response of 3.90 and a standard deviation is 1.147 indicating that citizen participation in some levels of public participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty generally. This shows that participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty.

The results based on the interview were in support of these findings following the verbatim discussion with healthcare worker HCW032 whose statement was captured below;

*“.....One of the key problems we have in the Subcounty specifically and the County generally is the issue of retrogressive cultural practices. Bungoma County is cosmopolitan. We have Tesos, Bukusu, Sabaot and Kikuyus though not many. One of the key issues that has affected the health sector in the Subcounty is the retrogressive cultural practices..... We have respect for people’s cultures but some have inhibited the participation of some members of the public in key issues of development including healthcare issues. Some of the cultures that inhibit public participation include traditional circumcision, home child bearing and religious beliefs in some instances. Traditional circumcision has really led to many damages like death or long-lasting scars that have led to trauma and psychological issues. Home child bearing has also led to untimely deaths of the new born and finally, some men believe in traditional circumcision while some women don’t like delivering in hospitals. Though, there are some improvements in these stereotypic cultural practices, there should be lasting impacts in the long run-on issues concerning healthcare in the Subcounty.”*

The above verbatim set of information was supported by HCW014 and HCW021, who noted that traditional cultural practices have to some extent, interfered with healthcare service provision in Sirisia Subcounty. These cultural practices need to be worked on so as to promote healthcare service delivery. Culture can cause tremendous impact on the goal of attaining effective healthcare service in the community in question.

#### **4.4.3 Analysis on the Efficiency of citizen participation on Healthcare Service delivery in Sirisia Subcounty**

The third objective of the study sought to examine the efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty. The respondents were required to give their opinion on various statements that described efficiency of citizen participation on a Likert scale of 1-5. Where; 1=Minimal extent; 2= Moderate extent; 3= Not sure; 4= Great extent; 5=Very great extent. The respondents were rated with respect to the mean and standard deviation. The results are presented in the table below.



**Table 4.6 Efficiency of Citizen Participation on Healthcare service delivery in Sirisia Subcounty.**

Statement	Minimal extent	Moderate extent	Not sure	Great extent	Very great extent	M	SD
Efficiency of citizen participation in Sirisia Subcounty has promoted healthcare service delivery	6.3%	17.9%	8.6%	21.9%	45.2%	3.82	3.82
Financial resources have been utilized appropriately in Sirisia Subcounty and this has promoted healthcare service delivery	4.7%	13.6%	27.2%	30.9%	23.6%	3.55	1.129
It is due to increased budget that healthcare service delivery in Sirisia Subcounty has been improved	0.7%	9.6%	26.6%	22.6%	22.3%	3.93	1.058
Ideas of the public in regard to healthcare are adopted in Sirisia Subcounty and this has improved healthcare service delivery	20.6%	13.0%	15.9%	28.6%	21.9%	3.18	1.446
Members of the public always participate in decision making process in Sirisia Subcounty and this has improved healthcare service delivery	10.3%	6.3%	13.3%	32.2%	37.9%	3.81	1.289
Community members are allowed to attend finance meetings to ensure every item and allocation is clear for their own benefit in Sirisia Subcounty	9.0%	4.3%	28.9%	41.9%	15.9%	3.51	1.094
Citizen participation brought by devolution has promoted efficiency of healthcare service delivery in Sirisia Subcounty	7.3%	5.3%	11.6%	30.9%	44.9%	4.01	1.200

The study sought to examine whether efficiency of citizen participation in Sirisia Subcounty has promoted healthcare service delivery. The study established that 45.2% and 21.9% of the respondents strongly agreed and agreed with the statement above respectively. 17.9% of the respondents disagreed with the statement that there is efficiency of citizen participation in Sirisia Subcounty and has promoted healthcare service delivery. Further, analysis indicates that 8.6% of the respondents were not sure as to whether efficiency of citizen participation in Sirisia Subcounty has promoted healthcare service delivery while 6.3% of the respondents strongly disagreed.

Further analysis on whether financial resources have been utilized appropriately in Sirisia Subcounty and this has promoted healthcare service delivery indicated that 30.9% agreed while 27.2% were not sure with the statement. In addition, results revealed that 23.6% of respondents strongly agreed that financial resources have been

utilized appropriately in Sirisia Subcounty and this has promoted healthcare service delivery. However, a considerable number of respondents disagreed with the statement above. This indicates that most of the respondents are not aware as to whether financial resources have been utilized appropriately in order to improve the healthcare system in the Subcounty.

The results also established that 26.6% of the respondents were not sure whether it is due to increased budget that healthcare service delivery in Sirisia Subcounty has been improved. Analysis further revealed that 22.6% and 22.3% of the respondents agreed and strongly agreed with the above statement respectively. 9.6% of the respondents disagreed with the statement that it is due to increased budget that healthcare service delivery in Sirisia Subcounty has been improved. These results indicate that most of the members of the public are not sure whether it is due to increased budget that healthcare service delivery in Sirisia Subcounty has been improved. Furthermore, most of the respondents could not tell whether there was budget increase in the first place since public participation in the budgeting process is minimal.

On whether ideas of the public concerning healthcare are adopted in Sirisia Subcounty and this has improved healthcare service delivery, the study established that 28.9% of respondents strongly agreed while 21.9% agreed with the statement. The study further established that 20.6% and 15.9% of the respondents strongly disagreed and were not sure whether ideas of the public concerning healthcare are adopted in Sirisia Subcounty and this has improved healthcare service delivery. 13% of the respondents disagreed with the statement. This implies that respondents have mixed results on the statement above indicating that they are not sure whether some of the ideas the public gives concerning the above subject matter are accepted or not.

The study also established that most respondents (37.9%) strongly agreed while 32.2% agreed with the statement that members of the public always participate in decision-making process in Sirisia Subcounty and this has improved healthcare service delivery. Only 6.3% were not sure and 10.3% of the respondents disagreed with the statement above. The mean response of 3.81 with a standard deviation of 1.084 further stressed the level of agreement with the above statement indicating that majority of the members of the public truly take part in decision making process in Sirisia Subcounty.

This was complemented by the interview from healthcare worker HCW007 as shown below;

*“.... Majority of the decisions made in the Subcounty are bottom up in nature. The devolution era embraces a pull system which is democratic rather than a push system which is dictatorial in nature as it used to happen before devolution was propounded. Some of these decisions have helped to improve on the budgetary allocation, the community can attend financial meetings and in the long run the ideas of the community are implemented in some projects”.*

Besides, HCW006 too had the same opinion as they noted that the current decision-making process in the Subcounty is more democratic as compared to the era before devolution of health was adopted. Contrary to the above findings is the results of the bottom- up decision-making process based on the fact that there are still some inefficiencies in the healthcare in relation to citizen participation. Democratic principle will call for total participation and commitment by all the stakeholders in the healthcare sector.

Concerning whether community members are allowed to attend finance meeting to

ensure every item and allocation is clear for their own benefit in Sirisia Subcounty, 41.9% of the respondents agreed with the statement above. However, 28.8% of the respondents were not sure whether community members are allowed to attend finance meetings to ensure every item and allocation is clear for their own benefit in Sirisia Subcounty. Further analysis revealed that 15.9% of the respondents strongly agreed that community members are allowed to attend finance meetings to ensure every item and allocation is clear for their own benefit in Sirisia Subcounty. The rest of the respondents (12.6%) disagreed with the statement above. This implies that members of the Subcounty were allowed to attend financial meeting to ensure every item and allocation is for own benefits in Sirisia Subcounty. However, majority of the respondents who were not sure claimed that it could not be ascertained as to whether all the ideas were meant to benefit members of Sirisia Subcounty.

The study findings indicated that most of the respondents (44.9 %) strongly agreed that citizen participation brought by devolution has promoted efficiency of healthcare service delivery in Sirisia Subcounty. 30.9% of the respondents agreed that citizen participation has been brought by devolution and has promoted efficiency of healthcare service delivery in Sirisia Subcounty. Further analysis revealed that 11.6% of the respondents were not sure while 7.3% of the respondents strongly disagreed whether citizen participation brought by devolution has promoted efficiency of healthcare service delivery in Sirisia Subcounty. Lastly, the study established that 5.3% respondents moderately disagreed with the statement above. The results indicate majority of the respondents are of the opinion that citizen participation has been brought by devolution has promoted efficiency of healthcare services delivery in Sirisia Subcounty

#### 4.4.4 Opinion on Healthcare Service delivery in Sirisia Subcounty, Kenya.

The dependent variable of the study is healthcare service delivery in Sirisia Subcounty. The respondents were required to give their opinion regarding various statements that described the variable on a Likert scale of 1-5. Where; 1=Minimal extent; 2= Moderate extent; 3= Not sure; 4= Great extent; 5=Very great extent. The respondents were rated with respect to the mean and standard deviation. The results are presented in the table 4.7 below.

**Table 4.7 Healthcare Service delivery in Sirisia Subcounty, Kenya**

Statement	Minimal extent	Moderate extent	Not sure	Great extent	Very great extent	M	SD
There is efficiency in healthcare service delivery in Sirisia Subcounty	.7%	.6.6%	11.3%	33.6%	47.8%	4.21	.935
In Sirisia Subcounty, there is low mortality rates and this has promoted efficiency in healthcare service delivery	1.7%	13.6%	15.9%	48.8%	19.9%	3.72	.988
There is improved supply of drugs in Sirisia Subcounty due to efficiency in healthcare service delivery	7.0%	18.3%	14.6%	23.3%	36.9%	3.65	1.325
The number of medical personnel in Sirisia Subcounty has increased and this has led to the efficiency in healthcare service delivery	3.3%	17.3%	18.5%	28.3%	32.6%	3.45	1.117
Many health centers in Sirisia Subcounty have experienced increased number of patients due to efficiency in healthcare service delivery	15.9%	11.3%	21.6%	11.6%	39.5%	3.48	1.493
Public participation is necessary in the improvement of healthcare services and this has led to efficiency in healthcare service delivery	3.7%	9.6%	26.2%	26.9%	33.6%	3.77	1.124

The study sought to analyze whether there is efficiency in healthcare service delivery in Sirisia Subcounty of Bungoma County. The results revealed that 48.7% of the respondents strongly agree with the statement above while 33.6% of the respondents agreed with the statement above. However, a considerable number of respondents (11.3%), were not sure as to whether there is efficiency in healthcare service delivery in Sirisia Subcounty. Further analysis revealed that around 7% of the respondents disagreed with the statement that there is efficiency in healthcare service delivery in

Sirisia Subcounty. These results indicate that there is an improvement in the healthcare sector in the study area but some of the respondents still feel that the efforts that have been put in place to promote efficiency still need to be stressed further.

The data from the interview conducted with the healthcare worker HCW015 is as captured below;

*“.... Currently, In Sirisia Subcounty, the healthcare facilities are efficient because there is support from the Subcounty and the County generally. The healthcare facilities are adopting a preventive approach rather than a curative approach. .... Furthermore, there is improved medical supplies and equipment. All these strategies when cumulatively applied have improved healthcare services in the Subcounty”.*

Additionally, healthcare worker HCW017 also supported the above sentiments that the Subcounty has procured many medical equipment which have immensely boosted the day-to-day operations in the various healthcare facilities in Sirisia. The thematic understanding of the above sentiment is that the healthcare sector is now geared towards looking for long lasting solutions to diseases and illness, rather than just short-term solutions which is also a major focus of the world health organization.

The study sought to analyze whether in Sirisia Subcounty, there is low mortality rates and this has promoted efficiency in healthcare service delivery. The study established that most of the respondents (48.8%) were of the opinion that in Sirisia Subcounty, there is low mortality rates and this has promoted efficiency in healthcare service delivery while 19.9% of the respondents agreed with the statement above. However, the study further established that 15.9% of the respondents were not sure with what is happening in the Subcounty regarding the above matter. Further analysis revealed that 13.6% of the respondents disagreed that indeed in Sirisia Subcounty, there is low mortality rates and this has promoted efficiency in healthcare service delivery. This is

a clear indication that indeed in Sirisia Subcounty, there have been notable improvements in the health sector, which has drastically reduced mortality rates. However, some of the respondents are of the opinion that the Subcounty should be in a position to do more in this area in order to promote zero mortality rates.

The study sought to further analyze whether indeed there is improved supply of drugs in Sirisia Subcounty due to efficiency in healthcare service delivery. The study results indicate that 36.9% of the respondents strongly agree with the statement while 23.3% of the respondents agree with the statement above. Further analysis revealed that 18.3% of the respondents disagreed while 14.65 of the respondents were not sure at all as to whether there is improved supply of drugs in Sirisia Subcounty due to efficiency in healthcare service delivery. A further 7% of the respondents strongly disagreed with the statement above. From the above results, it is established that Sirisia Subcounty has made commendable strides when it comes to issues healthcare but a section of the population still felt that there is need to improve the sector further in order to realize better results.

On whether the number of medical personnel in Sirisia Subcounty has increased and this has led to the efficiency in healthcare service delivery, 22.6% of the respondents strongly agreed with the statement above while 23.3% of the respondents agreed. However, 18.5% of the opinion were not sure if the number of medical personnel in Sirisia Subcounty has increased and this has led to the efficiency in healthcare service delivery. In addition, the study established that 17.3% of the respondents disagreed with the statement above. A further 3.3% of the respondents strongly disagreed with the statement above. This indicates that indeed it is due to devolution that there is increased personnel in the Subcounty. However, majority of the respondents were not

sure whether it has led to the efficiency of the healthcare system or not. Key informants who were interviewed cited that devolution is good since it has made power and services to be closer to the people but there are still challenges like corruption, salary delays, inadequate support from the County and Subcounty and frequent strikes from healthcare workers that are inherent with it.

According to the results, 39.5% of the respondents were of the opinion that many health centers in Sirisia Subcounty have experienced increased number of patients due to efficiency in healthcare service delivery. However, 21.6% of the respondents were not sure if indeed many health centers in Sirisia Subcounty have experienced increased number of patients due to efficiency in healthcare service delivery. The results further indicated that 15.9% of the respondents strongly disagreed that many health centers in Sirisia Subcounty have experienced increased number of patients due to efficiency in healthcare service delivery. These respondents noted that in as much as devolution has helped in improving the health sector, there are still many issues that have not been dealt with in order to ensure the system is effective and efficient.

The findings above were supported by the views of healthcare worker coded HCW027 whose sentiments are as depicted as;

*“.... With mitigation of retrogressive cultural practices in the County, most people are considering going to the hospital as an option when they are sick. In Bungoma County, there are some cultures-religious beliefs, traditional circumcision and women giving birth at home- that had inhibited the development of healthcare services. There has been recent improvement in the number of people who seek medical services in the sub-Counties health facilities”.*

HCW012 and HCW019 were also in agreement with the above captured interview.

The two, also pointed out that there has been an increase in the number of people



seeking medical attention from hospitals in the Subcounty as compared to the period before citizen participation was adopted and embraced. The above findings give hope of the brighter future of the healthcare system especially with increased community sensitization. Doing away with such hinderances will be a bigger milestone in the healthcare sector not only in the study area but also nationally.

Public participation is necessary in the improvement of healthcare services and this has led to efficiency in healthcare service delivery according to 33.6% of the respondents who strongly agreed with the statement above. The study further indicated that 26.9% of the respondents agreed that public participation is necessary in the improvement of healthcare services and this has led to efficiency in healthcare service delivery. However, 26.2% of the respondents were not sure as to whether public participation is necessary in the improvement of healthcare services and this has led to efficiency in healthcare service delivery. This is because they noted that the concept of public participation is overrated and that it was not being effectively used to integrate citizens into the services that were being provided in health sector in Sirisia Subcounty.

In addition to that, 9.6% of the respondents were of the opinion that public participation is not necessary in the improvement of healthcare services. They noted that there is need to have a willing government that will change the fate of its citizens through implementation of sound and sustainable solutions. This indicates public participation is a key ingredient in ensuring that key sectors like the health sector in the study area are thriving. However, there is need for relevant stakeholders to implement it well in order to meet the needs of the public.

The results from the interviews with the healthcare workers was analyzed and the verbatim from one of them, HCW009 was as recorded below;

*“.....In Sirisia Subcounty, there is a lot of improvement in the healthcare sector since the beginning of devolution. Some other neighboring sub-Counties and wards seek medical services from our health centers. We have improved on the healthcare facilities by getting more x-ray machines, medical supplies in the form of other machines and drug supplies. Furthermore, we have laboratory equipment all over the Subcounty and this has led to efficiency in healthcare service delivery in the Subcounty. The Subcounty further does the External Quality Assessments (EQAs) around the County because as Sirisia, we are highly ranked by our neighbors in terms of healthcare provision.”*

Furthermore, two other interviewees HCW003 and HCW020, backed up the above opinion as they also stated that Sirisia Subcounty health facilities are among the most improved in Bungoma County and that, other neighboring Sub-Counties seek medical attention from Sirisia Subcounty referral hospital. This indispensable role brought by devolution and more so citizen participation, cannot be taken for granted.

#### **4.5 Analysis of Inferential Statistics**

The study sought to assess whether there was a statistically significant relationship between the variables. The analysis was done at three levels, determining the factor loading, Pearson's correlation and regression analysis.

##### **4.5.1. Correlation Analysis**

Correlation analysis helps to test the relationship between independent and dependent variables. The study sought to establish the nature of the relationship between development of healthcare service, level of citizen participation, and efficiency of citizen participation, which are the independent variables, and healthcare service delivery, which is the dependent variable. This analysis was determined by testing the

correlation between the target variables. This was tested using correlation coefficients as suggested by Cohen, West and Aiken, (2003). Correlation analysis helps to test the Linearity of the study variables in order to make inferences.

The analysis sought to test the linearity of the study variables in order to make inference to the entire population. This study used Pearson correlation (r) to test whether the relationship between the variables was significant or not at 95% confidence interval. The relationship between the two variables was considered to be strong and significant if the correlation (r) value was more than 0.6 and the p value was < 0.05. It was considered moderate if the correlation (r) was between 0.5 and 0.6 and it was considered weak if the correlation (r) was < 0.5. The results of the correlation are presented in the table 4.8 below.

**Table 4.8 Correlation Analysis for the Variables**

		<b>Healthcare Development</b>	<b>Level of Participation</b>	<b>Efficiency of Participation</b>	<b>Service Delivery</b>
Magnitude of citizen participation in the development of healthcare service	Correlation Coefficient	1.000			
	Sig. (2- tailed)	.			
Level of Citizen Participation	Correlation Coefficient	.412**	1.000		
	Sig. (2- tailed)	.000	.		
Efficiency of Participation	Correlation Coefficient	.330**	.464**	1.000	
	Sig. (2- tailed)	.000	.000	.	
<b>Service Delivery</b>	Correlation Coefficient	.446**	.334**	.617**	1.000
	Sig. (2- tailed)	.000	.000	.000	.

The study established that there was a very significant, positive, but weak correlation between the magnitude of citizen participation in the healthcare development and

healthcare service delivery in the study area ( $r=0.446^{**}$ ; P-value of .000). This indicates that as the healthcare facilities are developed in the study area, there is a likelihood that healthcare services will improve and hence reach everyone. This implies that healthcare development is key in promoting service delivery in the health sector in the study area.

The results also show a very significant, positive but weak correlation between citizen's level of participation and the healthcare service delivery in the Subcounty ( $r = .334^{**}$  and p value of .000). This indicates that the level of citizen participation is very important in enhancing service delivery at the healthcare. This should therefore be encouraged at all stages of healthcare in order to improve service delivery. As it stands now the level of participation is there but at minimal level though it seems effective in enhancing service delivery.

The results further revealed a very significant, positive and moderate relationship between efficiency of citizen participation and healthcare service delivery in Sirisia Subcounty ( $r=.617^{**}$  and a p-value of .000). This indicates that improvement in efficient citizen participation is likely to have a recommendable effect on service delivery at the hospitals. This is expected to improve decision-making and hence service delivery as the needs and interests of all stakeholders are put into consideration. This agreed with the findings of Ngondo (2014), who noted that public participation has to promote inclusion and equity in public resource allocation and service delivery for all. In addition, it must enhance legitimacy and build mutual trust and commitment between the people in government/power and citizens who are actually recipients of the services.

## 4.6 Hypothesis Testing

In order to test the study hypothesis and hence create a ground for making effective conclusions and recommendations the study did a simple liner regression and a multiple regression. The simple linear regression was used to test each hypothesis based on the study objectives. The model summary results of the study were summarized in the following tables 4.9.

**Table 4.9: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error</b>	<b>Sig.</b>
1	.446 <sup>a</sup>	.199	.187	.403	.000 <sup>b</sup>

a. Predictors: (Constant), magnitude of citizen participation in the healthcare development

The results of the study show that the magnitude of citizen participation in healthcare service development has a weak but very significant correlation with service delivery ( $r= 0.446$ ) at the referral hospital in Sirisia subcounty. Similarly, the results show R square which indicates the proportion of variance in the dependent variable that can be explained by a unit change in the independent variable was also computed and the results show that a unit change in healthcare development affects service delivery at the hospital by a magnitude of 19.9%. The results are statistically significant given that the p value  $< 0.05$ .

The results further sought to test whether the regression model can be effectively applied to make predictions between healthcare development and healthcare service delivery. The analysis of variance was presented as shown in table 4.10.

**Table 4.10: Analysis of Variance**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	15.390	1	15.390	94.928	.000 <sup>b</sup>
	Residual	48.476	299	.162		
	Total	63.867	300			

a. Dependent Variable: Service delivery

b. Predictors: (Constant), magnitude of citizen participation in the healthcare development

The results show that the F statistic was statistically significant at a 5% level of significance implying that the model is a suitable predictor of the relationship between the test variables. The study also established the model fitness by comparing the F-calculated and F-critical values. The results show that there is a strong variance between the regression means and the residual means leading to a very high and significant value of F statistic (F = 94.928; p value 0.000) this shows that the model is a good predictor of the relationship between healthcare development and healthcare service delivery at the Sirisia referral hospital.

The null hypothesis which stated that; ***H01: There is no significant relationship between the magnitude of citizen participation in the development of healthcare service and healthcare service delivery in Sirisia subcounty.*** The hypothesis was therefore rejected based on the ANOVA results which implies that healthcare development had an effect on the service delivery at the healthcare facilities. The results were further used to establish the regression coefficients which assisted the researcher to explain the rate of change in service delivery. The analysis was done to model the relationship using simple liner regression model depicted as;  $Y = \beta_0 + \beta_1 X_1 + \epsilon$  (Simple linear regression model). The results also assisted in establishing whether the relationship was statistically significant or was just by chance, using the *t* statistic. The results are presented in table 4.11.

**Table 4.11: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.381	.240		5.745	.000
1 Healthcare development	.614	.063	.491	9.743	.000

Dependent Variable: Service delivery

Using the standardized beta values which have been corrected for any errors in the data, the results show that the four independent variables have a relationship with the magnitude of citizen participation in the healthcare development and service delivery hence they can be used as good predictors. The results show that a unit increase in the development of healthcare facilities improves service delivery by 49.1%. The T value of 9.743 show that the relationship is not just by chance but it is statistically significant as the p value was less than 0.05. The results of the study were employed to develop a simple regression models expressed as;

$Y = \beta_0 + \beta_1x + e$  (Simple linear regression model) to indicate the model as;

$$Y = 1.381 + 0.614x + 0.63$$

The second hypothesis which read; **H0<sub>2</sub>**: *There is no significant relationship between the level of citizen participation and health care service delivery in Sirisia Subcounty*, was also tested to establish the effect of level of citizen participation on healthcare service delivery. The analysis first sought to establish the model summary as presented in table 4.12.

**Table 4.12: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig.
1	.334 <sup>a</sup>	.112	.239	.403	.000 <sup>b</sup>

a. Predictors: (Constant), level of citizen participation

From the results, the values of R represent denotes the correlation between the dependent and the independent variables. In this case, the correlation between the

level of citizen participation and service provision in health facilities is seen to be weak, positive and very significant ( $R = 0.334$ ;  $p\text{-value} = 0.000$ ). Further analysis was done using the R square which indicates the proportion of variance in the dependent variable that can be explained by a unit change in the independent variable. The results show that a unit change in the service delivery among health facilities can explain an 11.2 % change in level of citizen participation ( $R^2 = 0.241$ ). The study further sought to assess the efficiency of the model in predicting the relationship between the level of citizen participation and service delivery at the referral hospital. The results were presented in the analysis of variance table 4.13.

**Table 4.13: Analysis of variance**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	15.419	1	15.419	95.163	.000 <sup>b</sup>
Residual	48.447	299	.162		
Total	63.867	300			

*a. Dependent Variable: Service delivery*

*b. Predictors: (Constant), level of citizen participation*

The results show that the F statistic was significant at a 5% level of significance implying that the model is a suitable predictor. The study also established the model fitness by comparing the F- calculated and F-critical values. The results show that the F calculated,  $F_{0.05, 1, 299} = 95.163$ , was greater than F-Critical,  $F_{0.05, 1, 299} = 3.873$ ; the study concluded that the model fits well and hence can be used effectively to explain the relation between. Since the F calculated is greater than the F critical then the null hypothesis is rejected implying that there is a statistical relationship between the level of citizen participation and service delivery in referral hospitals. The study further sought to examine the simple regression model explaining the relationship between



the variables. The regression coefficients were computed and the results presented in table 4.14.

**Table 4.14: Regression Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.919	.185		10.363	.000
	Level of citizen participation	.478	.049	.491	9.755	.000

a. Dependent Variable: Healthcare service delivery

Using the standardized beta values which have been corrected for errors in the data, the results show that the variable, level of citizen participation and service delivery have a very strong statistical relationship hence they can be used as good predictors in the study. The results show that a unit change in the level of citizen participation can lead to improved service delivery by 49.1%. The T value of 9.755 show that the relationship is not just by chance but it is statistically significant as the p value was less than 0.05. This implies that the level of citizen participation has a statistically significant effect on service delivery. The simple regression model is expressed as shown below;

$\gamma = \beta_0 + \beta x + \epsilon$ , Which is modeled as;

$$Y = 1.919 + 0.491x + 0.049$$

The third hypothesis sought to test whether; ***H03: There is no significant relationship between the efficiency of citizen participation and healthcare service delivery in Sirisia Subcounty.*** The results were presented by first showing the model summary as presented in table 4.15.

**Table 4.15: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error
1	.617 <sup>a</sup>	.381	.372	.317

a. Predictors: (Constant), efficiency of participation

From the results, the values of R represent the correlation between the dependent and the independent variables. In this case, the correlation between efficiency of citizen participation and service provision in the healthcare was seen to be strong, positive and significant (R =0.617; p-value = 0.000). Further analysis was done using the R square which indicates the proportion of variance in the dependent variable that can be explained by a unit change in the independent variable. The results show that a unit change in efficiency of participation can only explain a 38.1 % change in service delivery ( $R^2 = 0.381$ ). The analysis of variance was computed to establish whether the model was a good predictor of the relationship between efficiency of citizen participation and service provision at the healthcare facilities and the results are as presented in table 4.16.

**Table 4.16: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.820	1	33.820	336.557	.000 <sup>b</sup>
	Residual	30.046	299	.100		
	Total	63.867	300			

a. Dependent Variable: Service delivery

b. Predictors: (Constant), efficiency of participation

The results show that the F statistic was significant at a 5% level of significance implying that the model is a suitable predictor. The study also established the model fitness by comparing the F- calculated and F-critical values. The results show that the F calculated,  $F_{0.05, 1, 299} = 336.557$ , was greater than F-Critical,  $F_{0.05, 1, 299} = 3.873$ ; the

study concluded that the model fits well and hence can be used effectively to explain the relation between the variables. Since the F calculated is greater than the F critical then the null hypothesis is rejected implying that there is a statistical relationship between efficiency of participation and service delivery in the subcounty health facilities.

The null hypothesis H0<sub>3</sub>: There is no significant relationship between the efficiency of citizen participation and healthcare service delivery in Sirisia Subcounty was therefore tested based on the F value and the results indicated that the null hypothesis is not accepted and hence the alternative hypothesis is accepted indicating that efficiency in citizen participation affects healthcare service delivery. In order to determine the contribution of efficiency of citizen participation on the service delivery in the subcounty, the regression coefficient was computed and the results presented in table 4.17.

**Table 4.17: Regression Coefficient**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.223	.137		8.937	.000
	Efficiency of participation	.675	.037	.728	18.345	.000

a. Dependent Variable: Service delivery

Using the standardized beta values, the results show that the independent variable has a relationship with the healthcare service delivery. The results show that a unit increase in the efficiency of citizen participation in matters of the healthcare improves service delivery by 72.8%. The T-value of 18.345 show that the relationship is not just by chance but it is statistically significant as the p value was less than 0.05.

The regression model is expressed as shown below;

$$y = \beta_0 + \beta x + e \text{ (Simple linear regression model)}$$

$$Y = 1.223 + 0.675x + 0.037$$

#### 4.7 Multiple Regression Model

The study also sought to establish the combined effect of the three test variables on the service delivery at the health facilities. The results also helped to test the assumption of the multiple regression of linearity was tested using the correlation analysis, multi-collinearity was tested using the tolerance and the VIF test, while the Independence of the Error term was tested using Durbin Watson Test. The model summary results are presented in table 4.18.

**Table 4.18: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.750 <sup>a</sup>	.563	.559	.307	1.988

*a. Predictors: (Constant), magnitude of citizen participation in the development of healthcare, level of citizen participation, efficiency of participation,*

*b. Dependent Variable: Healthcare service delivery*

From the results, the values of R represent the correlation between the dependent and the independent variables. In this case, the correlation between the three independent variables of healthcare development, level of citizen participation and efficiency of citizen participation and service provision in the healthcare was seen to be strong, positive and significant (R =0.750; p-value = 0.000). Further analysis was done using the R square which indicates the proportion of variance in the dependent variable that can be explained by a unit change in the combined effect of the independent variables.

The results show that a unit change in the independent variables can only explain a 55.9 % change in service delivery (R<sup>2</sup> = 0.559). This implies that if there is

improvement in the three test variables then there will be a 55.9% change in the service delivery. The assumption of linearity and independence of the error term was tested using Durbin Watson Test. The results indicated that there is a linear relationship between the test variables. Similarly, using the Durbin Watson test, the results revealed that there was independence of error term of the model since the Dublin Watson value calculated 1.988 was less than the critical value of 2. The analysis of variance was also computed and the results were presented in table 4.19.

**Table 4.19: ANOVA.**

	<b>Model</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	35.954	1	11.985	127.517	.000 <sup>b</sup>
	Residual	27.913	299	.094		
	Total	63.867	300			

a. Dependent Variable: Service delivery

b. Predictors: (Constant), efficiency of participation, healthcare development, level of citizen participation

The results show that the F statistic was significant at a 5% level of significance implying that the model is a suitable predictor. The study also established the model fitness by comparing the F- calculated and F-critical values. The results show that the F calculated,  $F_{0.05, 1, 299} = 127.517$ , was greater than F-Critical,  $F_{0.05, 1, 299} = 3.873$ ; the study established that the model fits well and hence can be used effectively to explain the relation between the variables since the p value was less than 0.05. The regression coefficient was also computed for the combined effect of the independent and the dependent variable and the results are presented in table 4.20.

**Table 4.20: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
(Constant)	.589	.194		3.037	.003		
1 Magnitude of citizen participation in the development of healthcare	.264	.056	.211	4.683	.000	.728	1.374
Level of Citizen Participation	-.027	.051	-.028	-.531	.596	.540	1.851
Efficiency Of Citizen Participation	.603	.047	.650	12.745	.000	.565	1.769

Dependent Variable: Healthcare service delivery

The results show that using the standardized beta values, the four independent variables have a relationship with service delivery hence they can be used as good predictors in the model. The results show that a unit increase in the development of healthcare facilities improves service delivery by 21.1%. The T value of 4.683 show that the relationship is not just by chance but it is statistically significant as the p value was less than 0.05. The results also show that a unit change in the level of citizen participation on the service delivery is likely to decrease by -2.7% though the effect is not statistically significant given that the T value is less than 2 and the p value < 0.05. This shows that citizen participation has a retrogress effect which has an impact of the efficiency of service delivery. The findings also established that there is a unit change in the efficiency of citizen participation in the healthcare contributes to 65.0% change in the service delivery. This relationship was noted to be statistically significant since the t-value of 12.745 was much greater than +2.

The Multiple linear regression model was computed and presented as follows,

$$y = B_0 + B_1x_1 + B_2x_2 + B_3x_3 + e$$

Where  $y$  is the dependent variable (delivery of healthcare services)

$\beta_0$  = Represents the constant;

$x_1$  = Represents Magnitude of citizen participation on the Development of Healthcare service;

$x_2$  = Represents Level of Citizen Participation;

$x_3$  = Represents Efficiency of Citizen Participation and

$e$  = Represents the Error Term.

$B_1$ ,  $B_2$  and  $B_3$  (Represents coefficients of determination for the regression analysis).

Regression coefficients was modeled as follows;

$$y = 0.589 + 0.264x_1 - 0.027x_2 + 0.603x_3 + 0.194$$

#### **4.8 Discussion of the Study findings**

##### **4.8.1 Magnitude of citizen participation in the development of healthcare service in Sirisia Subcounty.**

The first objective of this study sought to establish the magnitude of citizen participation in the development of healthcare service in Sirisia subcounty. The study sought to analyze the extent to which citizen participation has helped in the development of health care programs in Sirisia subcounty. The results indicated that health care facilities have been developed as a result of public participation in the study area. This is in line with the study by Dawson (2021), who noted that the vision of health sector reforms in Kenya are based on reformation of the system and decentralization of healthcare decision making framework to allow for public participation which is currently captured in the New 2010 Constitution. This was also confirmed by majority of the key informants who noted that indeed the health sector reforms are taking place in the study area. Before decentralization of the healthcare

system took place, it was almost difficult to develop the health sector because most of the decisions were pushy and top down hence coercive.

Analysis further indicated that hospital equipment had been brought to Sirisia Subcounty as a result of healthcare development. This is because development of health care facilities like dispensaries, hospitals and clinics require equipment for them to function and improve healthcare provision to the people of Sirisia subcounty. Further analysis indicated that healthcare development has been necessitated by public meetings that are held from time to time in the Subcounty. This indicates that through public engagements, Sirisia has improved on healthcare provision. Public participation is necessary in promoting healthcare development in Sirisia Subcounty. Also, decisions are made and implemented locally to meet local needs of the people in relation to healthcare service delivery.

The above results have been complimented by the findings of KIPPRA (2018) Report, that there is significant improvement in the health sector performance in Kenya since devolution was introduced. The report pointed out improved child survival over the last five decades, with reduction of under-five, infant, neonatal and maternal mortality. The nutrition status of children also improved. There is significant decline in communicable diseases and HIV prevalence due to devolution in Kenya. The study is further complemented by the findings of Kubai (2019), in Meru County who further noted that since implementation of devolution especially in the health sector, service delivery has improved in terms of affordability, availability and accessibility to the common citizen.



The study also revealed that devolution was being implemented in the correct manner though facing some challenges but maintained that there is need for counties to work hand in hand with the National Government to ensure resources benefit the larger majority in county governments. The study also indicates that healthcare development affects healthcare service delivery in the Subcounty because in order to deliver improved healthcare to the people of Sirisia, the necessary infrastructure like hospitals, dispensaries and the associated equipment have to be set up.

#### **4.8.2 Level of Citizen Participation on Healthcare Service Delivery in Sirisia subcounty.**

The second objective of the study sought to examine the level of citizen participation on healthcare service delivery in Sirisia Subcounty. The results show that the level of participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty. The results further indicate that citizen participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty generally. The study analyzed whether citizens were involved in health care programs during initiation, planning, implementation or monitoring and evaluation. This shows that participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty since most of the citizens are involved in healthcare programs in all levels of participation.

The above results were further complimented by results from key informants who noted that health is a technical issue that the community may not be able to understand the technical bit. However, the county takes suggestions and aligns them to the mission and the vision of the county, then plan for implementation and finally monitoring and evaluation of health-related projects. Key aspects of community

expectations are analyzed and siphoned in order to make informed decisions on which projects should be started. Key informants further noted that community members/the public are involved in the initiation and planning phases of health projects. With monitoring and evaluation, it becomes harder for the community to be involved in this process.

For example, HCW 007 noted that in many cases, monitoring and evaluation is done through CHVs or by the county officials themselves. Communities are involved in this aspect by providing key information regarding the extent to which they are satisfied with projects regarding healthcare. This indicates that the community is involved in community development projects like health care projects in the area under study. The study is further complemented by the findings of (Black, 2012) who noted that well-structured deliberative public participation has been shown to produce high-quality engagements, especially in a diverse environment thereby reducing problems of marginalization, exclusion and inequality (Sui & Stanisevski, 2012).

However, Shapiro and Murphy (2012) fear that such meetings may lead to group polarization, with one or both groups taking a hardline position because of lack of trust or beliefs they hold regarding the matter and how it influences their lives. This indicates that involving the community/public in decision-making is time-consuming and costly in terms of money and energy. Further analysis revealed that starting from the initiation, planning, implementation and monitoring and evaluation processes needs a lot of time to establish a meaning process that can effectively engage people and their thoughts. This means that public participation is key in promoting community development projects including health care programs.

### **4.8.3 Efficiency of citizen participation on Healthcare Service delivery in Sirisia Subcounty**

The study sought to examine the efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty. The study sought to analyze the extent to which efficiency of citizen participation has promoted in utilization of financial resources. Results indicated that community members indicated that through public participation, financial resources are managed relatively well. This has helped to promote health care development in the subcounty. On whether ideas of the public are included in the development plans of the subcounty, the results indicated that since devolution is bottom up, some of the ideas are implemented in order to capture the needs of the people.

The results indicate that majority of the respondents are of the opinion that citizen participation has promoted efficiency of healthcare services delivery in Sirisia Subcounty. These results agree with the findings of Papa (2016) who noted that Busia County leadership demonstrates weak decision process involving public participation; acknowledged persons, funds, organizations and service providers necessary for carrying out an assortment of aspects of public participation. Papa (2016), further suggested that decision making process needed to be made more inclusive so as to achieve better results. Moreover, respondents said there were inadequate democratic social networks and gender inclusion techniques in designing public participation program(s).

However, the study indicated that the arrangement of forums, workshops or public meetings requires adequate funds, long preparation time and enough staff to coordinate and capture the needs of the people. Comparing with the benefits, the transaction cost may be even higher in some instances making it harder to realize its

objective. Therefore, conducting a participation project with a low cost is challenging especially due to inadequate financial resources that counties are allocated by the national government.

It is further established that participating in public meetings is usually not a priority for people when competing with work, household or other daily obligations. Less time is available after completing daily chores, which makes the engagement more difficult. Furthermore, traditional public engagement approaches generally take a longer time with less satisfying results, leading to an even lower rate of participation. Thus, increasing the efficiency of the participation approaches without compromising the outcomes is an urgent need that different county need to embrace.

These results agree with the findings of Waheduzzaman (2010), which noted that hindrances to the practice of participation of people in the local administration can be mitigated using the appropriate means for improving the participation of people in plans for development which can add to quality governance. Waheduzzaman (2010), further noted that there are multiple setbacks leading to the people's participation incompetence. Some of the obstacles include lack of awareness and lack of a robust legal system for participation.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of research findings, conclusions and recommendations for the study. The general objective of the study was to examine the Effectiveness of Citizen Participation on Healthcare Service Delivery in Sirisia Subcounty of Bungoma County, Kenya. The specific objectives of the study were to analyze the magnitude of citizen participation in development of healthcare service, examine the level of citizen participation and to establish the efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty, Bungoma County, Kenya. The chapter further provides areas for further research based on the analysis of the data.

#### **5.2 Summary of Findings**

##### **5.2.1 Demographic variables**

The study achieved a response rate of 80.05% which was accepted as appropriate for further analysis of the study results. The results agreed with the view of Marton (2006), who noted that a response rate of above 70% is considered appropriate for a descriptive study. The response rate was further supported by the view of Kothari (2019), who noted that a response rate for a field survey of above 70% is appropriate for use in the data analysis process of any descriptive survey. Furthermore, interviews were conducted in Sirisia Subcounty and all the 32 officers who were targeted were interviewed. The response rate for key informants was 100% since their number was manageable during data collection process and the time taken in collecting data was less as compared to the data collection at the household level.

In regard to gender of the respondents, the study established that 54% of the households were headed by the males which implied that men were the main decision makers in the household unit in the study area. This is an indication of the dominance of men in male dominated societies especially in developing countries. In regards to age of the respondents, the study established that most of the respondents were in their adult age of between 26-35 years and participated actively in healthcare matters of their families hence they were considered to have knowledge on healthcare in the study area. On the issue of education, the study established that most of the respondents had attained basic education, which they use in making appropriate decision related to matters of healthcare.

This was in line with Alawode et.al. (2020), who noted that education is key in enabling people to act rationally on issues affecting their lives including healthcare for the sake of this study. On whether respondents had stayed in Sirisia for a considerable period of time in order to give information on the subject under study, the study established the majority of the respondents had stayed in the study area for a long period of time and therefore had adequate knowledge about the healthcare system of the study area hence better placed to give sufficient information on the subject at hand.

### **5.2.2 Magnitude of citizen Participation in the Development of healthcare service in Sirisia Subcounty.**

The first objective sought to establish the magnitude of citizen participation in the development of healthcare service in Sirisia Subcounty. In regards to this objective, various statements that defined development of healthcare service in Sirisia Subcounty were developed and given to the respondents in order to provide their opinions regarding the same. From the data analyzed, the study noted that majority of

the respondents acknowledged that health facilities had been developed as a result of healthcare development process in Sirisia Subcounty. The study further established that majority of the respondents noted that hospital equipment had been brought to Sirisia Subcounty as a result of healthcare development process. This was in tandem with the findings from the key informants who noted that hospital equipment like X-ray machines had been bought in order to raise the standards of the healthcare sector in the study area.

On whether public meetings have been brought about by healthcare development process in the Subcounty and whether this has promoted efficiency in healthcare service delivery in Sirisia, most of the respondents agreed with the statement above. However, more than 25% of the respondents were not sure with the above statement, a factor that was supported by data from key informants who noted that public participation was there but it was majorly done through community health workers/volunteers (CHW/Vs) who were directly working with households. Further, analysis revealed that majority of the respondents were of the opinion that members of the public participated in healthcare development through public meetings and this has promoted efficiency of healthcare service delivery in Sirisia Subcounty. However, more than 30% of the respondents were not sure of the same. This was also raised by key informants who agreed that indeed there was public participation but some people are hindered to participate in them as a result of some retrogressive cultural practices like traditional circumcision and bearing of children from home as opposed to hospitals.

Further analysis revealed that 56.9% of the respondents were of the opinion that there was improved healthcare development as a result of public participation in Sirisia

Subcounty. This indicates that citizens are conscious of their health needs and that is why they get time to take part in issues related to health. Also, the study established that there were mixed reactions on whether public participation is necessary in promoting healthcare development in Sirisia Subcounty, most of the respondents were of the opinion that indeed it is necessary. However, a good number of the respondents disagreed since they noted that some projects are usually implemented without public participation. This was supported by data from key informants who noted that some projects do not require public participation due to the technical bit that is involved. Also, public participation is usually hindered by inadequate funds that have marred most Counties and sub-Counties including Sirisia Subcounty.

The study results were supported by the results from correlation analysis which indicated that as the healthcare facilities are developed in the study area, there is a likelihood that healthcare services will improve and hence reach everyone. This implies that healthcare development is key in promoting service delivery in the health sector in the study area. Further, the results from the regression analysis indicated a unit change in healthcare development affects service delivery in Sirisia sub- County by a magnitude of 19.9%. This is a clear indication that healthcare development in the study area is key in promoting healthcare service delivery at the household level in the study area. Results are further complemented by the findings of Kubai (2019), in Meru County, who established that since implementation of devolution especially in the health sector, service delivery has improved in terms of affordability, availability and accessibility to the common citizen.



### **5.2.3 Level of Citizen Participation on Healthcare Service Delivery in Sirisia subcounty.**

The second objective of the study sought to examine the level of citizen participation on healthcare service delivery in Sirisia Subcounty, Bungoma County, Kenya. The respondents were required to give their opinion regarding various statements that described level of citizen participation on the above subject. The study sought to analyze whether members of the public are involved in healthcare programs during initiation phase and whether this has promoted efficiency in healthcare service delivery in Sirisia Subcounty. The study established that majority of the respondents agreed with the statement above. This was complemented by the data from key informants especially doctors and nurses who noted that members are involved in healthcare programs during initiation but this is usually done through CHV/Ws in the County and the Subcounty generally.

According to the results, majority of the respondents noted that members of the public are involved in healthcare programs during planning phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty. However, during planning phase community representatives are usually involved in order for them to give their recommendations on behalf of their communities. The study also noted that most of the respondents were of the opinion that Sirisia Subcounty allows members of the public to be involved in healthcare programs during implementation phase and this has promoted efficiency in healthcare service delivery. However, 30% of members were not sure of the above statement. This indicates that members had mixed reactions on the above issue.

The study further noted that majority of the respondents were of the opinion that members of the public are involved in healthcare programs during monitoring and evaluation and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty. It is due to this that transparency and accountability is promoted in community development projects like health projects. The study sought to examine whether in Sirisia Subcounty, members of the public are involved in all the phases of healthcare programs and this has promoted efficiency in healthcare service delivery. The study established that most of the respondents agreed with this statement. However, the results had some mixed opinions regarding the same as a good number of respondents disagreed with the statement above. This was supported by the results from key informants who noted that monitoring and evaluation is done from time to time but the community is involved in it through CHV/Ws.

The study established that majority of the respondents agreed that the level of participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty. The rest of the respondents however, agreed that participation of the residents of the Subcounty into all the levels of participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty. The results are in tandem with inferential statistics of correlation analysis which indicates that citizen participation in all levels of citizen participation is very important in enhancing service delivery of the healthcare in the area under focus. This should therefore be encouraged at all stages of healthcare service delivery in order to improve the welfare of the residents in matters concerning health.

As it stands now, the level of participation in key issues regarding health is there but at minimal level though it seems effective in enhancing service delivery for the residents of Sirisia Subcounty. Further analysis revealed that a unit change in the service delivery among health facilities can be explained at 11.2 % change in level of citizen participation ( $R^2 = 0.112$ ). This means that when citizens take part in all the levels of citizen participation, it influences healthcare service delivery in the Subcounty by 11.2%. Results are further supported with the findings of Black (2012), who noted that well-structured deliberative public participation has been shown to produce high-quality engagements, especially in a diverse environment thereby reducing problems of marginalization, exclusion and inequality.

#### **5.2.4 Efficiency of citizen participation on Healthcare Service delivery in Sirisia Subcounty**

The third objective of the study sought to examine the efficiency of citizen participation on healthcare service delivery in Sirisia Subcounty. The respondents were required to give their opinion regarding the various statements that described efficiency of citizen participation. On whether there is efficiency of citizen participation in Sirisia Subcounty and whether this has promoted healthcare service delivery, the study established that majority of the respondents agreed with the statement. In regards to whether financial resources have been utilized appropriately in Sirisia Subcounty and whether this has promoted healthcare service delivery, the study indicated that most of the respondents were in agreement with the statement above. However, the rest of the respondents were split between disagreements and not being sure whether financial resources have been utilized appropriately in Sirisia Subcounty and if this has promoted healthcare service delivery. Most of the

respondents noted that the health sector had been marred with problems like corruption, inadequate staff-patient ratios, inadequate equipment, and frequent strikes by health workers amongst other challenges. All these issues have dwindled the achievements that were intended through devolution.

On whether it is due to increased budget that healthcare service delivery in Sirisia Subcounty has been improved, most of the respondents were in agreement with the same. However, a good percentage of the respondents noted that they were not part of the budget making process and therefore, they could not validate the statement above. Others noted that even if they were part of the process, most of the time, their ideas are never implemented in the long run. Results from key informants indicated that the health sector had indeed been starved of the resources it required in order to make sufficient gains in the study area. Also, most of the members disagreed that their ideas as the public in regard to healthcare are adopted in Sirisia Subcounty and this has improved healthcare service delivery. They noted that in most cases, public participation had been used in a selfish manner by politicians to propagate their own agenda hence rejecting the essence of the process in improving the welfare of citizens.

On whether members of the public always participated in decision making process in Sirisia Subcounty and whether this has improved healthcare service delivery, the study noted that majority of the respondents agreed with the statement. According to them, they participate in the decision-making process by giving their suggestions through CHV/Ws who in the long run forward them to concerned parties. To some extent, they noted that it had improved healthcare in the Subcounty. Lastly, the study

sought to examine whether, citizen participation brought by devolution has promoted efficiency of healthcare service delivery in Sirisia Subcounty.

Majority of the respondents were of the opinion that citizen participation brought by devolution has promoted efficiency of healthcare service delivery in Sirisia Subcounty. Respondents noted that the main aim of public participation was to encourage the public to have meaningful input into the decision-making process. In the long run, the main goal of public participation is to provide the opportunity for communication between agencies making decisions and the public so as to ensure there is ecumenism.

The results further revealed a very significant, positive and moderate relationship between efficiency of citizen participation and healthcare service delivery in Sirisia Subcounty ( $r=.617^{**}$  and a p-value of .000). This is a clear indication that improvement in efficient citizen participation is likely to have a recommendable effect on service delivery at the hospitals. This is expected to improve decision-making and hence service delivery as the needs and interests of all stakeholders are put into consideration. This agreed with the findings of Ngondo (2014), who noted that public participation has to promote inclusion and equity in public resource allocation and service delivery for all. In addition, it must enhance legitimacy and build mutual trust and commitment between the people in government or power and citizens who are actually recipients of the services. A unit change in efficiency of citizen participation accounts to 38.1% of healthcare service delivery.

### **5.3 Conclusions of the Study**

Based on the findings of this study, we draw the following conclusions:

Firstly, for the healthcare service delivery to materialize in the study area, the three independent variables: (healthcare development, level of citizen participation and efficiency of citizen participation), have to be implemented in accordance with the needs of citizen. This is indicated by the study results which imply that if there is improvement in all the three test variables then there will be 55.9% change in the service delivery. This is evident that the three independent variables are significant in improving healthcare in the Subcounty if well implemented in the study area.

Secondly, there is a very significant, positive, but weak correlation between the magnitude of citizen participation in healthcare development and healthcare service delivery in the study area ( $r=0.446^{**}$ ;  $P=.000$ ). This implies that there is need to first develop healthcare facilities and in the long run they will promote healthcare service delivery in the health sector in the study area. The study also concludes that the level of citizen participation is very important in enhancing service delivery at the healthcare sector in Sirisia Subcounty. This means that citizens should be encouraged to take part in all stages of healthcare development in order to improve service delivery in the Subcounty.

From the results analyzed, it was also noted that development of healthcare is necessary since it is a prerequisite in the realization of improved health sector in the Subcounty specifically and the County generally. In order to improve on the development of Healthcare in the Subcounty, public participation is important since it has been used as an avenue for sensitizing the public on issues that surround healthcare development.

Thirdly, the results show a very significant, positive but weak correlation between citizen's level of participation and the healthcare service delivery in the Subcounty ( $r = .334^{**}$ ,  $p=.000$ ). From the above results, the level of citizen participation is very important in enhancing healthcare service delivery in the Subcounty. Also, citizen participation has been brought by devolution and has promoted efficiency of healthcare services delivery in Sirisia Subcounty. This is because it has amplified citizens' voices to take part in issues that are of greater importance to them including health. However, it is evident that most of the respondents noted that they don't fully take part in key issues affecting them.

The study further concludes that there is a very significant, positive and moderate relationship between efficiency of citizen participation and healthcare service delivery in the Subcounty ( $r=.617^{**}$ ;  $p=.000$ ). The study noted that improvement in efficiency of citizen participation is likely to have a commendable effect on healthcare service delivery at the health centers in Sirisia Subcounty. This is expected to improve decision-making and hence service delivery as the needs and interests of all stakeholders are put into consideration.

Lastly, there is a statistical relationship between efficiency of citizen participation and healthcare service delivery in the health centers in Sirisia Subcounty. This indicates that there is efficiency in healthcare service delivery in the study area. It was also established that some of the decisions have helped to improve on the budgetary allocation, the community attend financial meetings and in the long run the ideas of the community are implemented in many projects including the health sector.

## **5.4 Recommendations for the Study**

Based on the findings of this study, the following recommendations are drawn. They are categorized into policy and theoretical recommendations.

### **5.4.1 Policy Recommendations**

- i. The study recommends that there is need to upscale public participation in Sirisia Subcounty and Bungoma County at large, beyond resource allocation to project management including health projects just as public participation activities are done for budgetary discussions are planned for from time to time.
- ii. Bungoma County Government authorities, agencies and agents have a duty to respond to petitions and challenges from citizens. Public authorities should promote accountability by ensuring that expenditure of public funds is subject to effective oversight so as to ensure that development in areas like the health sector is improved through increased budgets and proper utilization of the allocated resources. The County should promote informed debate on issues of public interest.
- iii. In order to achieve the main goal of public participation, the Subcounty and County should create structures, mechanisms and guidelines for citizen participation. The structures and guidelines should ensure participation is open to all without discrimination and have safeguards against domination of the consultations by one group. This will ensure that the outcome of these meetings is owned by the citizens and hence sustainability in development projects including health projects.
- iv. In addition to the above, there is need for Sirisia Subcounty and Bungoma County Government as a whole to come up with a comprehensive public



participation process which should involve stakeholders in the health sector. This will ensure that key issues of contention are established and solutions developed holistically to address them.

#### **5.4.2 Theoretical Recommendations**

- i. Members of the County Assembly in the area under study should be aware of their grass root support and what that means for meaningful public participation. Therefore, as stipulated in the Constitution, they should be heavily involved in organizing, mobilizing, and ensuring that the public's views are heard and incorporated in decision making processes in order to ensure that the main goal of devolution is achieved.
- ii. Bungoma County Government should establish mechanisms to facilitate public communications and access to information with the widest public outreach using media like television stations, information communication technology centers, websites, community radio stations, public meetings; and traditional media. This will enable citizens to understand their responsibility through enlightenment in the process of public participation in healthcare service delivery issues.
- iii. Also, Sirisia Subcounty should organize public participation meetings in a way that allows deliberative communication that is two-way and oriented towards problem-solving, as opposed to meetings that are restricted to the answering of questions and at which the organizers give no room for dialogue. This change of tack will allow citizens to influence the decision-making process and will make them partners and not clients in the governance process.
- iv. Furthermore, the Subcounty and the entire county should put in effort to plan for and conduct public participation for other governance processes such as project

management which includes monitoring and evaluating key projects including health projects in the study area. This will ensure that there is transparency and accountability in the development process in the County generally and the Subcounty specifically.

- v. Lastly, follow ups should be made up on policy implementation in various departments and projects. This will ensure that they are implemented without failure or blackmail. It is unfortunate that policies are just put on paper and there is no accountability in practice.

## **5.5 Areas for further Study**

Following the above recommendations, the study proposes the following areas for further studies and research;

- i. Further research on the same factors needs to be conducted in other Sub Counties and counties in Kenya in order to contrast and compare the findings. This will enable the current study to be inferred to the larger research universe. This will further ensure achievement of universalizability of research findings.
- ii. There is also need for further studies that will focus on a multi stakeholder approach including the National Government, Private hospitals, NGOs and other organizations working in the field of health in order to identify other factors that influence healthcare service delivery in the study area.
- iii. Further studies should dig deeper in assessing culture as a determinant of healthcare service delivery in the study area so as to analyze the extent to which it influences healthcare delivery.
- iv. There is also need to apply other theories and models in ascertaining the extent to which public participation is key in community development projects other than the health sector.
- v. Further research should be done to provide a clear direction for policies intended to respond to the spirit of the Constitution of Kenya 2010, and to bring about a people-centered and politically-engaged open society.

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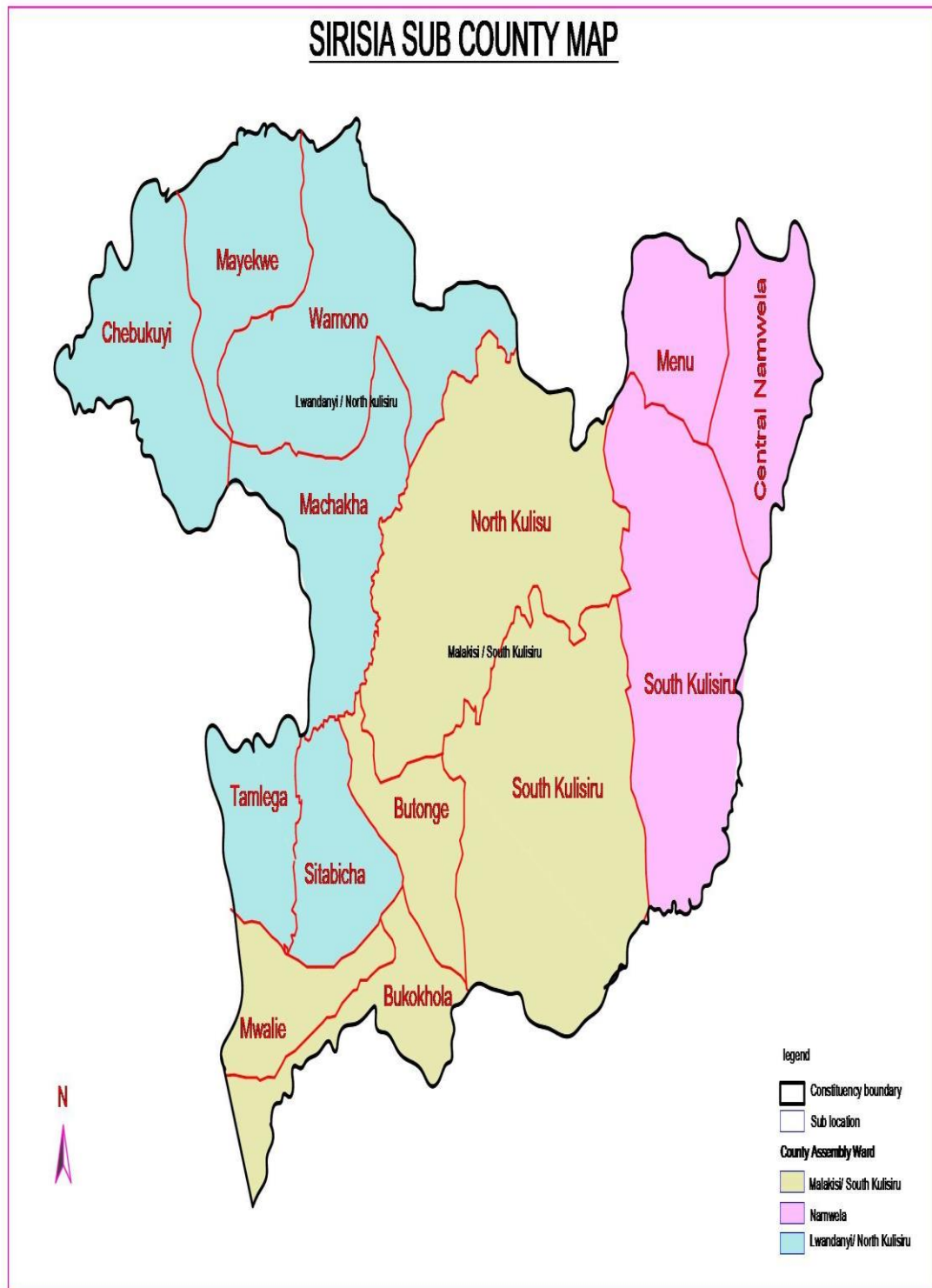
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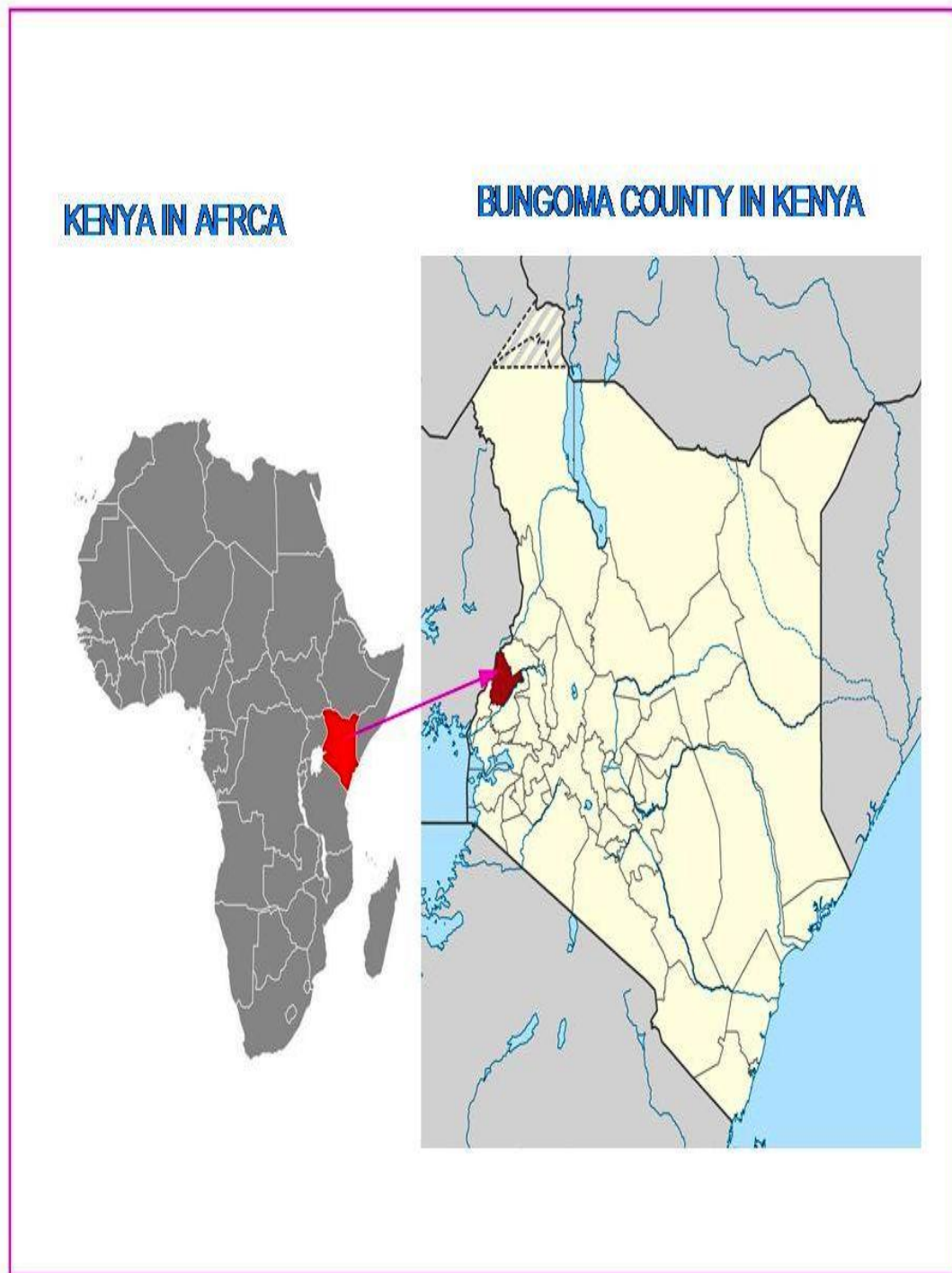
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## APPENDICES

### Appendix I: Map of Sirisia Subcounty



**Appendix II: Bungoma County in Kenya and Kenya in Africa Maps**



### **Appendix III: Introduction Letter**

**OBUSHE DENNIS OMUSE**

**P.O. Box 861-20500,**

**NAROK-KENYA.**

Dear respondent,

**RE: DATA COLLECTION**

I am a student at Maasai Mara University Pursuing a Master of Arts Degree in Public Policy and Administration. I am carrying out data collection for my research paper titled '*Effectiveness of citizen participation on healthcare service delivery in Sirisia Subcounty, Bungoma County, Kenya*'. I therefore kindly request for your input by filling this questionnaire. Please note that your responses will be in strict confidence and will purely be used for academic purposes. Your acceptance to complete this questionnaire is greatly appreciated.

Thanking you in advance for your co-operation.

Yours faithfully,

Obushe Dennis Omuse

### Appendix IV: Questionnaire for the Households heads in Sirisia Subcounty

Please tick your response/choice as appropriate.

#### SECTION A: General Information

1. What is your gender? Male  Female

2. What is your Age Bracket?

Below 25 years  26 to 35 years

36 to 45 years  46 to 59 years

Above 60 years

3. What is your highest level of Education?

None  Primary school

Secondary school  College

University

4. How long have you lived in the Subcounty?

Less than 5 years  5 to 10 years  11 to 20 years

More than 20 years

#### Section Two: Response on the objectives of the Study

You are required to provide your opinion on the following statements that seek to assess on a scale of; **5= Very Great Extent; 4 = Great Extent; 3 = Not Sure; 2= Moderate Extent; 1 = Minimal Extent.** To what extent do you agree or disagree with the statements in line with the objectives of the study?

#### SECTION B: Healthcare development and Healthcare service delivery in Sirisia Subcounty

Statement	5	4	3	2	1
In Sirisia Subcounty, Health Facilities have been developed as a result of healthcare development					
Hospital equipment have been brought to Sirisia Subcounty as a result of healthcare development					
Public meetings have been brought about by healthcare development in the Subcounty and this has promoted efficiency in healthcare service delivery in Sirisia					
Members of the public participated in healthcare development through public meetings and this has promoted efficiency of healthcare service delivery in Sirisia Subcounty					



There is improved healthcare development as a result of public participation in Sirisia Subcounty					
Public participation is necessary in promoting healthcare development in Sirisia Subcounty					

**SECTION C: Level of Participation and healthcare service delivery in Sirisia Subcounty**

Statement	5	4	3	2	1
Members of the public are involved healthcare programs during initiation phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty					
Members of the public are involved healthcare programs during planning phase and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty					
Sirisia Subcounty allows members of the public to be involved healthcare programs during implementation phase and this has promoted efficiency in healthcare service delivery					
Members of the public are involved healthcare programs during monitoring and evaluation and this has promoted efficiency in healthcare service delivery in Sirisia Subcounty					
In Sirisia Subcounty, members of the public are involved in all the phases of healthcare programs and this has promoted efficiency in healthcare service delivery					
Level of Participation in healthcare service delivery in Sirisia Subcounty has helped to improve service delivery in the Subcounty.					

**SECTION D: Efficiency of citizen participation and healthcare service delivery in Sirisia Subcounty**

Statement	5	4	3	2	1
Efficiency of citizen participation in Sirisia Subcounty has promoted healthcare service delivery					
Financial resources have been utilized appropriately in Sirisia Subcounty and this has promoted health care service delivery					
It is due to Increased budget that healthcare service delivery in Sirisia Subcounty has been improved					
Ideas of the public in regard to healthcare are adopted in Sirisia Subcounty and this has improved healthcare service delivery					

Members of the public always participate in decision making process in Sirisia Subcounty and this has improved healthcare service delivery					
Community members are allowed to attend finance meetings to ensure every item and allocation is clear for their own benefit in Sirisia Subcounty.					
Citizen participation brought by devolution has promoted efficiency of healthcare service delivery in Sirisia Subcounty					

**SECTION E: Healthcare services in Sirisia Subcounty**

<b>Statement</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
There is efficiency in healthcare service delivery in Sirisia Subcounty due to public participation					
In Sirisia Subcounty, there is low mortality rates and this has promoted efficiency in healthcare service delivery					
The is Improved supply of drugs in Sirisia Subcounty due to efficiency in healthcare service delivery					
The number of medical personnel in Sirisia Subcounty has increased and this has led to the efficiency in healthcare service delivery					
Many health centers in Sirisia Subcounty have experienced Increased number of patients due to efficiency in healthcare service delivery					
Public participation is necessary in the improvement of healthcare services and this has led to efficiency in healthcare service delivery					

Briefly, give your general view on the extent to which you feel that citizens in Sirisia Subcounty participate in healthcare decisions and how this affects the efficiency of the health system. -----

-----

**Thank you for participating!**

**Appendix V: Interview Guide for the hospital staff**

**Interview Date** ----- **Serial Number** -----

**SECTION A**

**1. What is your Gender?**

Male  Female

**2. What is your Age Bracket?**

25 years or below  26 to 35 years   
36 to 45 years  46 to 55 years   
56 to 65 years

**3. Which capacity do you serve in the hospital?**

Doctor  Pharmacist   
Clinical Officer  Office Administrator   
Technical Staff  Hospital Management   
Nurse

**4. What is your highest verifiable level of education?**

Never attended School  Primary school   
Secondary school  College   
University

**5. How long have you worked in this hospital?**

Less than 5 years   
5 to 10 years   
11 to 20   
More than 20 years

## **SECTION B: Opinion of healthcare workers in Sirisia Subcounty**

1. To what extent has healthcare development been witnessed in Sirisia Subcounty?
2. Are you familiar with the healthcare system in Sirisia Subcounty?
3. Do you participate in decision making regarding healthcare service delivery in Sirisia Subcounty?
4. Are you satisfied with the way the decisions are made regarding healthcare in Sirisia Subcounty?
5. Would you say that the healthcare system is effective in offering services to the citizens in Sirisia Subcounty?
6. In your opinion, do you think levels of citizen participation are key regarding the decisions made in the Subcounty?
7. Are you sensitized on matters of health within Sirisia Subcounty by the County Government?
8. What role does the community as a whole play in enhancing the availability of health services in Sirisia Subcounty?
9. Do you take part in the Monitoring and Evaluation process of the healthcare projects in Sirisia Subcounty?
10. What is your opinion on the well-being of citizens regarding healthcare systems in the Subcounty?
11. Do you think there is efficiency in healthcare service delivery in Sirisia sub-County?
12. Has devolution of the health sector improved service delivery in the health facilities in the Subcounty? If yes, to what level can you rate the improvement?
13. To what extent does culture affect healthcare service delivery in this subcounty? If yes, please elaborate briefly.

## Appendix VI: Maasai Mara University Authorization Letter



**Maasai Mara University**  
BOARD OF POSTGRADUATE STUDIES  
OFFICE OF THE DIRECTOR

P.O. BOX 861 – 20500  
Narok, Kenya [www.mmarau.ac.ke](http://www.mmarau.ac.ke)

Tel: +254 – 20 -2066042  
+254 – 20 - 8081874

11<sup>th</sup> February, 2022

**RESEARCH PERMITS SECTION  
NACOSTI  
UTALII HOUSE**

**REF: OBUSHE DENNISE OMUSE (REG. NO. AM02SP/MN/10611/2019)**

We wish to confirm that the above named is a bona fide Master's student at Maasai Mara University pursuing Master of Arts degree in Public Policy and Administration in the School of Arts, Humanities, Social Sciences & Creative Arts. His proposed research is '*Efficacy of Citizen Participation on Healthcare Service Delivery in Sirisia Sub-County, Bungoma County, Kenya*'. He would like to apply for a research permit from NACOSTI before he can proceed for field work and data collection.

We further confirm that the candidate has adhered to all research protocol requirements of Maasai Mara University and the proposed research has been rated as having no known adverse impacts on the environment and does not pose any ethical concerns.

This is therefore to request your office to issue him with a research permit.

Faithfully yours,

MAASAI MARA UNIVERSITY  
P.O. Box 861 - 20500  
NAROK

**Prof. Romulus Abila, PhD.**  
**Director, Board of Postgraduate Studies**

abila@mmarau.ac.ke  
DIRECTOR  
BOARD OF POSTGRADUATE STUDIES  
[orcid.org/0000-0001-8762-7153](https://orcid.org/0000-0001-8762-7153)

## Appendix VII: NACOSTI Research Permit

  
REPUBLIC OF KENYA

  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 907824 Date of Issue: 21/February/2022

**RESEARCH LICENSE**



This is to Certify that Mr. DENNIS OMUSE OBUSHE of Masai Mara University, has been licensed to conduct research in Bungoma on the topic: EFFICACY OF CITIZEN PARTICIPATION ON HEALTHCARE SERVICE DELIVERY IN SIRISIA SUB-COUNTY, BUNGOMA COUNTY, KENYA for the period ending : 21/February/2023.

License No: NACOSTI/P/22/15815

907824  
Applicant Identification Number

  
Director General  
NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY &  
INNOVATION

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document,  
Scan the QR Code using QR scanner application.

## Appendix VIII: Bungoma County Authorization Letter

### COUNTY GOVERNMENT OF BUNGOMA



#### OFFICE OF THE COUNTY SECRETARY AND HEAD OF PUBLIC SERVICE

Telephone: 0725 39 39 39  
E-mail: [countysecretary@bungoma.go.ke](mailto:countysecretary@bungoma.go.ke)

Municipal Building  
P.O Box 437- 50200  
**BUNGOMA**

**Our Ref:** CG/BGM/CS/GEN/VOL. V (41)

**Date:** 1<sup>st</sup> March, 2022

#### TO WHOM IT MAY CONCERN!!!

**RE: RESEARCH AUTHORIZATION – DENNIS OMUSE OBUSHE**

Your letter Ref: No. NACOSTI/P/22/15815 on the above subject refers.

We acknowledge the request and subsequent approval from the National Commission for Science, Technology and Innovation to conduct research in Bungoma County.

This is to grant approval for three months to carry out the research in Bungoma as stipulated in the license subject to relevant approvals from **County Commissioner** and **County Director – Education Bungoma County**.

Kindly accord her the necessary assistance required.

A handwritten signature in blue ink, appearing to read 'Wambati J. W.'.

Wambati J. W  
**COUNTY SECRETARY & HEAD OF PUBLIC SERVICE**

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Vision: A hub of Diversity for Social Economic Development

## Appendix IX: Bungoma County Director of Education Letter



REPUBLIC OF KENYA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY  
State Department of Basic Education and Early childhood – Bungoma County

When Replying please quote  
e-mail: [bungomacde@gmail.com](mailto:bungomacde@gmail.com)

County Director of Education  
P.O. Box 1620-50200  
BUNGOMA

Ref No: BCE/DE/19/VOL.III/207

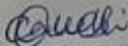
Date: 1<sup>st</sup> March 2022

TO WHOM IT MAY CONCERN

**RE: AUTHORITY TO CARRY OUT RESEARCH – MR. OBUSHE DENNIS OMUSE  
NACOSTI/PI/22/15815**

The bearer of this letter Mr. Obushe Dennis Omuse of Masaai Mara University has been authorized to carry out research on "*Efficacy of citizen Participation on Healthcare Service Delivery in Sirisia Sub County, Bungoma County*" for the period ending 21<sup>st</sup> February 2023..

Kindly accord him the necessary assistance.

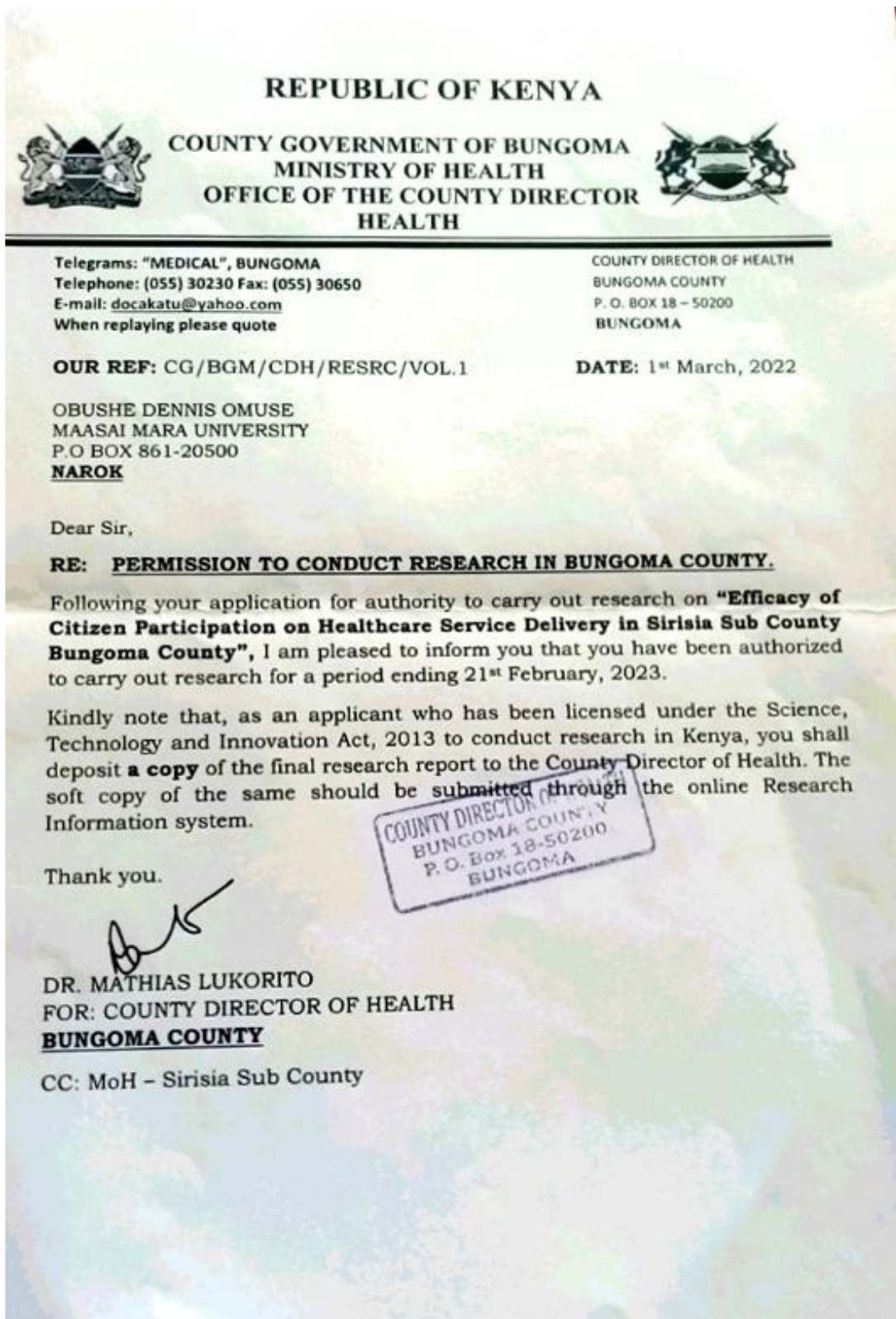
  
CALLEB OMONDI  
FOR COUNTY DIRECTOR OF EDUCATION  
BUNGOMA COUNTY

COUNTY DIRECTOR OF EDUCATION  
BUNGOMA  
P.O. Box 1620,  
BUNGOMA - 50





Appendix X: Bungoma County Authorization Letter



**Appendix XI: Deputy County Commissioner Authorization Letter**

REPUBLIC OF KENYA



THE PRESIDENCY

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: "DISTRICTER" BUNGOMA WEST

Telephone

E-mail: [15-county.com.sirisia@gmail.com](mailto:15-county.com.sirisia@gmail.com)

When replying please quote

Deputy County Commissioner

Bungoma West Sub-County

P.O Box 100-50208

SIRISIA

REF: BGM-W-ADM/15/22/VOL.1/48

2<sup>nd</sup> March, 2022

Assistant County Commissioners

BUNGOMA WEST

RE: RESEARCH AUTHORIZATION – OBUSHE DENNIS OMUSE

Reference is hereby made on the County Commissioner's letter No. ADMIN.15/13/VOL.111/161 of 1<sup>st</sup> March, 2022.

The above named has been granted authority to carry out a research on the topic "**Efficacy of Citizen Participation on Healthcare Service Delivery**" in this Sub-County for a period of two weeks starting on 2<sup>nd</sup> March, 2022.

Kindly, accord him necessary assistance.

**BUNGOMA WEST SUB-COUNTY**  
DEPUTY COUNTY COMMISSIONER  
BUNGOMA WEST SUB-COUNTY  
Deputy County Commissioner  
BUNGOMA WEST

Cc:

County Commissioner

BUNGOMA, (Your letter Ref No. ADM. 15/13/VOL.III/161 of 1<sup>st</sup> March, 2022 refers)

✓ Obushe Dennis Omuse

Appendix XII: Director of Health Authorization Letter

