

**ASSESSING PREPAREDNESS OF HEALTH CARE FACILITIES IN THE
IMPLEMENTATION OF UNIVERSAL HEALTH CARE
IN NAKURU WEST SUB-COUNTY, KENYA**


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DECLARATION AND APPROVAL


I hereby declare that this study is my original work and has not been submitted to any University for the award of a degree.

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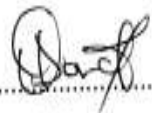
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DEDICATION

This thesis is devoted to my parents and collages for their prayers and an ending motivation



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I am grateful to God for giving me the strength and the grace to carry out this study; it could not have been possible without His guidance and help. I am thankful for my supervisors Dr. Moses Esilaba and Dr. Oscar Donde for their valuable guidance, patience in my thesis writing and support of my work. My special gratitude goes to my mother Salome Kemunto, my sisters Christen Mwangi and Nelly Saina, my niece Ruby Kemunto, my daughter Sarah, my friends Fancy Kipkoech and Wendy Jemeli Tirop for their prayers, motivation and financial support during the study, may good God bless you all. My also appreciation goes to the university librarian for his never-ending support in provision of materials to assist me in my research work. My gratitude also goes to Mount Kenya University fraternity for granting me the opportunity to study at the institution and also supporting me all through my study period.

ABSTRACT

Universal health care (UHC), all Kenyans are able to access essential quality health services without suffering financial hardship which depends on availability and competence of health care providers whose intent is to deliver health services to the Country's population. The study aimed to examine the preparedness on the health care facilities on the implementation of UHC in Nakuru West Sub-County in tier 1, 2 and 3 at public health facilities, private health facilities and faith-based health facilities. The study applied cross sectional design. Data collection was through administration of structured questionnaire to various staff at Sub-County hospital, health centres and dispensaries. Interviews were conducted on health key informants; a checklist was used on the availability of health facilities and Focus Group Discussion (FGDs) with community members who visited the health facilities. The stratified sampling was used to select facilities from six different wards which were grouped into hospitals, dispensary and community clinics, while stratified sampling was used on the health care providers, purposive sampling on the key informants and focused group discussion on the community members seeking health services in health facilities. The data was analyzed descriptively through determination of means and frequencies as well as inferentially through Spearman's correlation analysis to determine the relationship between the perception on the healthcare facilities readiness, the perception on the role played by CHVs and the perception on the satisfaction level of the CHVs with the successful implementation of the UHC. All the test was performed at 95% ($P=0.05$) level of significance. Data analysis was done by Statistical Package for Social Sciences (SPSS) 23rd version computer software. The study results indicated that the health care providers received some general training as well as supervision. However, some health care providers had not acquired adequate training on UHC, inadequate number of HCP, inadequate efforts to motivate them, inadequate funding making the healthcare facilities lack essential commodities and also the CHVs were fundamental in the implementation of UHC; however they received inadequate facilitation by county government. Most of the amenities necessary for the implementation of the UHC were still at inadequate state. It was only the level of electricity connection and labeling of the rooms within the health facilities which showed strongest and statistically significant positive Spearman's correlation with readiness for UHC implementation ($R=0.944$ and $P=0.045$ & $R= 0.922$ and $P=0.038$ respectively). In conclusion, CHVs had significant contribution to the implementation of UHC (High R values and P values of <0.05). Their satisfaction had significant contribution on the implementation of UHC (high R values and P values of <0.05). For effective UHC implementation, there is need for the national and county governments to avail adequate funds to all facilities for improvement of the amenities provide proper facilitation on UHC, adequate appreciation of HCP. Recommendation, recruiting adequate numbers of HCP, more funds on policy facilitation, upgrade of health facilities amenities and adequate funds to support CHVs. There is need for further study to be conducted to establish the community members' uptake of UHC.

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LIST OF ABBREVIATIONS AND ACRONYMS

- CBHI**-Community-Based Health Insurance
- CHV**-Community Health Volunteers
- CHPs**-Community Health Providers
- DHIS**-Demographic Health Information System
- GOK**- Government of Kenya
- GSHRH**-Global Strategy on Human Resource for Health
- HRH**-Human Resource of Health
- HCPs**-Health Care Providers
- ILO**- International Organization
- ITNs** -Insect Treated Nets
- KNBS**-Kenya National Bureau of Statistics
- KHF**-Kenya Health Federation
- LMIC**- Low-middle-income Countries
- MCT**- Measures of Central Tendency
- MOH**-Ministry-of-Health
- MDGs**- Millennium-Development-Goals
- NACOSTI**-The National-Commission for Science-Technology and Innovation.
- OOP**- Out-of-Pocket
- PHC**-Primary Health Care
- PFSA**-Pharmaceutical Fund and Supply Agency
- ROK**-Republic of Kenya
- SDGs**- Sustainable Development Goals
- USAID**-United States Agency for International Development
- UHC**- Universal Health Care

USA- United States of America

UN-United Nations

WHR- World Health Resources

WHO-World Health Organization

WB-WorldBank



CHAPTER ONE

INTRODUCTION

1.1 Background Information

Globally 400 million people are not able to get quality services they need in health care while 5 billion people are unable to get affordable, safe, equitable health services despite World Health organization putting a lot of effort to support healthy life style (WHO, 2006). UHC is all about communities and individuals get services in health they require without suffering financial hardship which includes health promotion, in treatment, prevention, palliative and rehabilitation care services. For services to be delivered, Health care provides need to have skills on outreach in community level and ensure quality services are given to the community to improve health and protecting the community from financial difficulties while reducing people from being pushed to poverty due to unexpected break out of diseases.

To attain UHC it requires multiple approaches and primary health care which focuses on strengthening and organizing health systems in order for the community to access health care services based on their preferences. UHC involves effective, safe, quality health care which is essential while including affordable medicines and vaccines for all without pushing them to poverty. Accessibility of quality health services has improved in Kenya due to increase in inpatient admission and access of services in outpatient and the country has improved in developing national referral strategy which provides guidelines that are clear on referral processes, reproductive health, maternity health care provision in level 3 and child health adolescent services. In terms of quality of services it offers policy guidelines in non communicable diseases, infections and cancers control (Witter, Brikci and Scherer, 2022).

WHO is recommended as a resolution to encourage nations to come up with health financing systems which aims in achieving UHC for example United Nations General Assembly and World Bank. Every year it is indicated that 150 million population experience catastrophic expenditure in health where payment are made by each household out – of- pocket that consumes all the income pushing 100 million people into poverty. Therefore UHC will contribute in improving health, reduce poverty vulnerability and ensure equity in accessing of health services.

The report by WHO has shown inadequate number of 7.2 million health care workers from 83 nations globally which do not meet the required number of currently health skilled providers(Miseda,2017).A total of 57 African countries are facing the highest issues in relation to health care providers, with a shortage of 2,360,000 health care providers and 1,890,000 in managerial level (WHO, 2006 and Miseda,2017). Therefore, professional health care providers shortage experienced in Africa is the worst especially in the poorest countries with an increase of 24% in diseases, while the health care providers available to serve the population of around 1.34 billion is 4% hence, not able to offer the required services to satisfy continued increase in population in the Sub-Saharan Countries (Kickbusch and Sturchio, 2014).

Sub-Saharan region shows shortage of nurses, midwives, doctors, laboratory technicians, common health providers, and health professionals due to the outbreak of new infections and diseases outbreak leading to high mortality rate (Haseeb, 2018).The population of health care providers is at 2.28 per 1000 population due to poor working conditions, under funded healthcare facilities, low salaries and little advancement in career opportunities(Haseeb, 2018).East African region shows high inadequate number of health care providers at 1.9 per 1000 population. Therefore, East African countries came up with a way to bring together health systems to promote implementation of UHC

which is “Open Health Initiative” that allows the population access health care services (Yamin and Maleche, 2017). Uganda shows poor maintenance of health facilities, overcrowding in health facilities which are poorly kept / unclean and run down, 50% of them lack electricity and running water, lack of basic drugs, no ambulance services in case of emergencies, low number of facilities with no laboratory services and lack structures of data collection, reporting and feedback (Doctor, Nkhana-Salimu and Abdulsalam-Anibilowo 2018).

Twenty percent of Kenyan population access health services while the remaining 80% of the population cannot access health services that they require despite the introduction of free health services in most of the health facilities (Gaye, 2014). The vision for Kenya in 2030 is to make sure all Kenyans get health care services which are quality and affordable. To be able to achieve this goal, the Kenyan government’s first medium – term plan of 2008- 2012 aim was to repair health care delivery systems and health outcome which was affected by inequitable distribution of human resources (MOH, 2015). Access and provision of quality health care is a right guaranteed by the 2010 constitution in Kenya (Mugo and Onsumu, 2018).

Kenya has shown a lot of commitment in health care by devolution of health care to counties and introduction of free Maternal Care to pregnant mothers and by removing payment in lower-level health care facilities. However, devolution of health care to counties has negatively affected health care providers in delayed salaries, lack of continuous medical trainings, lack of harmonization of salaries and lack of harmonized schemes of service (Okech and Lelegwa, 2016). Therefore, Universal Health Care (UHC) is to ensure communities and people are able to get rehabilitative, preventive, palliative, curative and promotive health services related to health care so that the population does not suffer financial problems (WHO, 2017).

In Kenya the population agrees UHC to be a good thing because it addresses directly lack of access to affordable financial protection and health care to the poor. The launch has generated important political national debate, the relationship between health care, poverty and a nation responsibility of Kenyans, however, it is not clear the direction which UHC is heading and the end of experiments with it, even those involved in implementation have no information on what will happen next (Khamala, Wangama, 2020)

However, the current elected government has worked tirelessly in the progress towards UHC through administration and budgeting process, making sure all the counties are allocated resources they require while choosing other counties like Kisumu due to high prevalence associated with malaria, Isiolo because of high maternal death , Nyeri due to higher burden of non-communicable diseases and Machakos high prevalence of injuries due to road accidents to pilot the project before rolling it down to other counties (Isofa, Molyneux, and Goodman, 2017). For the CHVs it showed that Poor definition of roles, inadequate regular supervision and poor distribution of resources acts as a barrier for health volunteer programmes to succeed in many countries (Singh, 2018). Community Health Volunteers representation is not well defined whether they are represented by NGOs or community health system hence leading to confusion of accountabilities and responsibilities in turn making it difficult to give them the support they require (Tulenko, 2013).

Nakuru County consists of 11 sub countries, 55 wards and a population of 1,603,325 who rely on Agriculture, Tourism, livestock production (KNBS, 2017). 66.3% of the population travel long distances to access health facilities. However, Nakuru County was rated as a county leading in affordable and quality healthcare, but most of the Sub-County's population comprises of high class, middle class, low-income class which

includes slums and pre-urban areas with health facilities lacking essential drugs and vaccine, inadequate trained health care providers, the community travel long distance to visit the health facilities and poor infrastructure therefore there is more need to address shortage of equipment in health facilities, low medical providers and high cost of medical services (ROK, 2013). There was also limited health facility in high populated areas and Provincial General Hospital is not able to withstand high rising health demand (ROK). Therefore, there is need for the county government to look into all these health concerns before UHC is rolled out.

1.2 Statement of the Problem

Globally WHO has shown inadequate number of 7.2 million health care providers who are needed to provide health care needs of the population, and African countries indicated a higher number of shortages of health care providers (Miseda, 2017). A large population is not able to access health care services and cash payment is not attainable by the poor households.

Kenyan government has shown a lot of commitment to fulfilling the requirement in the constitution by guaranteeing all citizens a right to access quality services, through piloting of universal health care (UHC) to other counties before its full implementation in the entire country and made efforts through policy formulation, resources allocation in preparation to welcome the UHC (Isofa, Molyneux, and Goodman, 2017).

However, these policies have been met with a lot of violence and disagreement from health care providers especially nurses (Koon 2016) and the number of health care providers in Kenya as well as within the county governments, including Nakuru County is still at a very low level and currently standing at 1.9 per 1000 below the WHO recommendation of 22.8 per 10,000 population for doctors and 22.8 for nurses and devolution of health care has caused effect on health care providers by delayed salaries,

lack of continues training and lack of harmonized salaries (Paul, Robert, Helen and MOH, 2019, Yamin and Maleche, 2017).

Nakuru County has shown limited number of health care providers as compared to its high population which is at 1 HPCs per 2,027 population as compared to WHO recommendation of 1 HCPs per 435 population, however, there is no available literature to show the inadequacy of health care providers, departments affected each nurses, clinical officers etc, and no trainings prepared on UHC while the status of health facilities amenities are at inadequate state.

Nakuru west Sub County comprises of high population with high class, middle class and low-income households with inadequate health facilities located in poor income areas having limited resources and those health facilities lack qualified managers to run them, lack of equipment in laboratories and lack of essential drugs as supported by Kenya (2018) is another challenge. Therefore, there is need to assess the preparedness of health care facilities within Nakuru West Sub County for the implementation of UHC to be realized.

1.3 Study Purpose

The main goal was to assess the preparedness of health care facilities in the implementation of universal health care in Nakuru West Sub-County.

1.4 Study Objectives

1.4.1 Broad Objective

To assess the preparedness of health care facilities on the implementation of universal health care in tier 3, 2, 1 health facilities within Nakuru West Sub-County Kenya.

1.4.2 Specific objective

1. To assess the capacity of health care providers at tier 3, 2, 1 health facilities in Nakuru West Sub-County, Kenya on the implementation of universal health care.
2. To assess the gaps in health care provision at tier 3, 2, 1 health facilities in Nakuru West Sub-County, Kenya.
3. To evaluate the readiness of amenities and health facilities on the implementation of universal health care at tier 3, 2, 1 in Nakuru West Sub County, Kenya.
4. To evaluate the role and tier of satisfaction of community health volunteers on the implementation of universal health care at tier 3, 2, 1 health facilities in Nakuru West Sub-County, Kenya.

1.5 Research questions

1. What is the status of capacity of health care providers at tier 3, 2, 1 health facilities in Nakuru west Sub County on the implementation of universal health care?
2. What are the gaps in healthcare provision at tier 3, 2, 1 health facilities in Nakuru West Sub County, Kenya?
3. What is the level of readiness in the amenities and health facilities on the implementation of universal health care at tier 3, 2, 1 health facilities in Nakuru West Sub County, Kenya?
4. What is the role and level of satisfaction of community health volunteers on the implementation of universal health care at tier 3, 2, 1 health facilities in Nakuru West Sub County, Kenya?

1.6 Study Significance /Justification

The findings from this study will be beneficial to the County government in formulating appropriate policies to support health care providers through equitable health care

distribution. It also stands to enlighten the county and national governments on the health facilities and services needed for improved healthcare service provision. The health care providers, county and national governments stand to benefit from having more knowledge on UHC implementation, which in return will provide necessary information required to successfully and appropriately rollout the UHC to other counties/entire county. The study also identified gaps that need to be filled for improved universal health care service provision.

1.7 Study Scope

The study was conducted on health care providers in health facilities in (tier 3,2 and 1) situated in Nakuru West Sub County. The respondents were health care providers, community volunteers, and Key informants and on the available community members present in the health facilities in time of the study. The study took approximately 8 months from July 2019 to February 2020.

1.8 Limitation of the Research

The study was limited by the respondents feeling that they were breaking work ethics through revealing of health information especially due to diversity of facilities in public and private; hence they were unwilling to respond to some study questions. Inadequacy in finances, poor road network and lack of accessibility were additional challenges during the study in places like Buret and Kapkures. Furthermore, most of the informants did not have managerial skills as the researcher had hoped.

1.9 Delimitation

A researcher sought signed consent from the health managers to allow her access to the health care providers in public and private facilities and assure confidentiality on the information given it was only to be used for educational purpose. However, the

researcher created a good rapport that encouraged them to participate by creating a good communication and assure the respondents that the research was for learning purpose and nothing was done without their consent because they were given consent form to Sign if they were willing to participate on the study. For the informants the researcher went for the most senior members in the health facilities to achieve the targeted population and additional information in order to achieve the target however, they did not have the managerial skills as the researcher had hoped for. The researcher used motorbike to access those inaccessible areas and the researcher assumed that the most Senior members in the facilities had the required information.

1.10 Assumptions of the study

It was assumed that the respondents would be available to give the required information for the researcher to use to make study conclusions. It was also assumed that the weather will be favorable for easy collection of data. The study assumed that the chosen sample represented the views of all health care providers in Nakuru county level 3, 2 and 1, and the respondents were truthful and honest in responding to the questionnaires. The research assumed that the most senior members had the required information on the facilities and had the managerial skill which was not the case.

1.11 Operationalization and Definition of Terms

UHC-ensuring communities can use rehabilitative, preventive, promotive, palliative and curative services in health .

Gaps-These is training being provided, supervision provided, knowledge level on UHC before implementation of UHC and appreciation offered in places of work.

Health care providers-the managers in health, healthcare givers who offer well-being services and health volunteers services to the community.

Implementation-starting to operationalize a project or program or going ahead or forward.

Care providers and health volunteers- the people who their greatest intent is to offer well-being care services to the community and introduce the community to the health facilities.

Preparedness-this is how well or the ability of health care providers capable of implementing UHC project, trainings on UHC, policies in place to welcome the project, to check the accessibility of drugs and equipment in health amenities.

Care-The extent which health needs of the population or community is covered through taking care of their health.

Health- this is a state of population being free from diseases

Informants- this are senior most respondents in the hospital or those in charge of hospital facilities who have information on the health facilities.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter informs more on the literature review relevant to the study and it relates to the study objectives. The study presents capacity of health care providers in relation to implementation of UHC, gaps in health care provision, amenities and health facilities readiness for implementation of universal health care and the role and satisfaction level of community health volunteers in implementation of universal health care.

2.2 Empirical literature

This explains more in the literatures done by other scholars and their outcomes and contribution to the body of research.

2.2.1 Implementation Universal Health Care (UHC)

The role of Universal Health Care is to ensure the whole population is able to acquire the health services they need without challenges of paying for the services (WHO, 2010, and Ooms, 2014). According to recent World Bank / World Health Organization (WHO) research (2017) reflects that half of the world's population is not able to get access to required health services, while 100 million have been pushed to extreme poverty due to a lot of resources used in health expenditure, despite WHO commitment to promote health. Globally 400 million people are not able to access good quality services, while 6% are from developing countries (WHO, 2010).

Globally 40% of the population cannot afford social protection to prevent them from health-related disease burden (Ghebreyesus, 2017). The constitution of 1948 by WHO declared health as fundamental human right in ALM-ATA declaration of 1978. Later, the World health assembly came up with a way forward in encouraging

countries to adopt UHC to their health systems (Abuya, 2015). The goal of UHC implementation is to provide health for the whole population whether they have resources or not and financial risk protection to make sure they access health services. (WHO, 2010, and ROK, 2015). Kenya is one of the countries in progress of UHC despite the country having inadequate funds; however, it has made NHIF compulsory to all employees although only minimum population utilizes those services, which could be as a result of unawareness, ignorance and lack of the government strategies to involve the public in decision making (Abuya, Maina, and Chuma, 2015).

According to research, it indicates that Rwanda has put a lot of effort in implementation of UHC; they came up with an insurance that supports the poor in the society which is Community-Based Health Insurance (CBHI). The insurance covers 81.6% of the population between 2015-2016, the report by Rwanda social security board (RSSB), which led to the population use less money out of pocket. This implementation was started from the ground up by using the community health volunteers who acted as the link from community to facilities and finally to hospitals (Chamoun, 2018).

The current elected government has worked tirelessly in the progress towards UHC through administration and budgeting process, making sure all the counties are allocated resources they require while choosing other counties like Kisumu, Isiolo, Nyeri and Machakos to pilot the project before they hand it over to other counties (Isofa, Molyneux, and Goodman, 2017). Most of the policies have been changed to welcome UHC, which has shown a lot of government commitment to the project in bringing in free services in public health facilities like Linda mama (Abuya, 2015)

2.2.2 Capacity of health care providers

In spite of the efforts of WHO supporting health care globally, the required number of health care providers is below 17.4 million according to the report in the 2013 and most countries affected were from African region (WHO, 2016). The report from WHO in 2016 showed a limited number of health care providers from 57 countries. However, in order to meet the needs of the community an addition of 4.3 million of health care providers are needed (Cormetto, and Buchan, 2013). Hence, due to this shortage more efforts should be made in creating more institutions to train health care providers to meet the raising needs in the community. Since socio-demographic of age distribution amongst health care providers play an important key on ageing population, this calls for well-trained health care providers who can meet the demands of services required in health facilities (Kabene, 2006).

A report from Sub Sahara Africa shows that 36 out of 47 countries are experiencing real inadequacy in health care providers while Malawi's health surveillance revealed the same shortage due to migration of health care providers to other countries (Shiao, and Sheikh, 2010). The government of Thailand being ahead of achieving UHC, they increased recruitment of health care providers by allowing 10,678 health care students to join in 2005, and in 2008, 13 public and private universities started training doctors (Jimba and Cormetto 2010). From this commitment it can encourage other countries to adapt their strategies to implement UHC and put more resources in training and preparing for future needs of health care providers.

When health facilities are not well maintained, health care providers are usually affected which leads to interference of health care programmes. Therefore, support of health care providers is vital in promoting the well-being of the community and population being served in case of any health emergencies that may arise (WHA, 2016).

Additionally, there is need to invest on skilled health care providers and good working conditions, to be able to meet the challenges of maldistribution and improve data storage of health providers (WHA, 2016).

Despite Kenyan government promises to strengthen essential services, most of the policies put in place have been met with a lot of violence and disagreement from the health care providers especially nurses which includes devolution of reforms and remuneration process, which has threatened the progress of UHC implementation (Koon, 2016). In Kenya little discussion by relevant stakeholders has been done on methodology of putting up minimum health care providers requirements that enables the country meet the health goals, however, at the moment there is shortage of health care providers in all cadres those employed are below the required number by WHO, 34,381 nurses employed 2013 as compared to 41,026 according to (MOH, 2014).

World Health Organization recommends 23 health workers per 10,000 people but, the country has inadequate numbers of 1 doctor, 12 nurses, and 12 midwives per 10,000 people. Clearly as a country there is a shortage of health care providers which has created a challenge causing uneven remunerations among cadres, poor attraction and retention, poor working conditions, and lack of continuous training (ROK, 2013). Health care system in Tanzania recorded a lot of issues in their system, low working morale within the health providers due to poor treatment from the government, in matters related to health they are never consulted in decision making, inadequate numbers of health care providers, poor supervision which leaves the facilities unsupervised, unreliable personnel and unsustainable salaries. Kenya dispensary recorded high number of registered nurses who are equipped with necessary skills as compared to Uganda health system which reflected high rates of layoff of staff, overworked doctors, low morale

among the staff and volunteers are not reliable to offer health community services (Abdul Salam-Anibilowo, Nkhana-Salimu and Doctor, 2018).

Social- demographic of age distribution among the health care providers play an important role in any county's health systems, so the ageing population needs to be considered and health care providers be empowered in terms of education to fill the gaps being experienced (Kabene, 2006).

2.2.3 Gaps in health care provision

World Health Organization health care providers, are skilled professionals involved in delivering health services to the communities or the population they serve, and encourage people to practice healthy behaviors like eating well balanced diet, use of condoms when engaging in sexual activities, regular hospital check -ups, immunization of children and use of family planning methods (WHO, 2006).

According to The International Organization (ILO) of 2014 estimated the global gap of health care providers to be 10.3 million and recent analysis by WHO estimate inadequacy of 18 million health care providers by 2030 (Richard, 2018) which might lead to prevention of achieving Sustainable Development Goals (SDGs). Global leaders agreed to face challenges of shortage in health providers and its agreement was forwarded by WHO's 2030 vision and was adapted, in May 2016 (Lopes, 2017). The International policy professionals, researchers and national bodies have decided to focus on global inadequate and poor distribution of health care providers (Kinfu, 2008, and Campbell, 2016).

In the month of April through the month of June 2015 a study was done on assessing needs skilled training with the main focus being, looking into skilled gaps of specialized health care workers in public and private hospitals in 46 counties. Several bodies were involved in this study which included Human Resource for health, Republic of Kenya

(ROH), United States Agency for International Development Funded Funzo Kenya program and ROH/Japan International Cooperation Agency HRH, USAID, WHO, 2014-2018 (Miseda, and Were, 2017). The result reflected Kenya's shortage in specialized health care providers which might cause problems in progressing towards attaining UHC (Mutuku, Muriangi, and Mutwiwa, 2017).

Despite the country's efforts to employ specialized health care providers from other countries, there are still some gaps and the reports on attrition is not well captured in Kenya (ROK, 2015). According to Kenya Health Labour Market Assessment of 2015 shows more than 5000 Kenyan specialized doctors have moved to developed countries due to low pay and 3000 to other sectors, leaving only 3,440 doctors to serve a population of 46 million Kenyans (Okech and Lelegwa, 2016). According to Kariuki (2018) Kenya has personnel of health care providers at 63,000 which consists nurses 21,000, clinical officers 3,200, 2,285 doctors, and 1,100 pharmacists the rest 35,000 are others, while WHO recommends 23 per 10,000.

Sub-Saharan countries have reflected health care shortage which was due to lack of enough resources to support employment of health care providers, poor imbalances and low distribution of the health care providers. Therefore, to achieve MDGs Sub-Saharan Africa countries were needed to improve on equitable distribution of health care providers in the health facilities in their countries (Miseda, and Odhiambo, 2017).

Rwanda is one of the countries with shortage of health care providers however, they transferred health responsibilities to nurses and community health providers but according to WHO recommendation there is shortage of 2.3 care givers per 1000 population. Despite the challenges they came up with ways to increase the numbers of health care providers by partnering with Academic Medical Centres in the USA who

assisted in training health care providers and upgrading them from certificate level to diploma and degree in health care systems. This has developed knowledge and brought in exchange programs which developed more skills in the areas of specialization (Binagwano, 2013).

Ethiopia on the other hand have increased their health care providers by increasing medical universities, helped paid tuition and accommodation for their student doctors. Upon conclusion, they rendered health services to public hospitals and through this medical doctor increased from 150 in 2004 to 3000 in 2016 (Ghebreyesus, 2016). Kenya as a country has inequitable distribution and deployment of health providers as per 2018 MOH report with, (USAID, WHO, HRH, World Bank, 2014-2018). Despite Investment in motivation and support on health care providers, there is shortage which does not match supply and demand as required by policies and regulatory framework in relation to planning, budgeting at national, regional and international levels (WHO, 2006).

Despite the support there is severe investment inadequacy in all cadres, maldistribution of gender imbalances and poor working environment that has caused crises in rural areas and immigrations to developed countries (Zurn, 2004 and WHO, 2010). Hence, the right mechanism should be put in place to avert global shortage of health providers (WHO and GSHRH, 2015). In 2018 a study of 60 nurses was done both in Nairobi and rural locations were interviewed on knowledge gap of policies using the cross-sectional. The results showed that among the 60 nurses who were interviewed majority were unfamiliar with the term UHC and defined it as a global movement and how health politics affects policy implementation in Kenya (Koon and Ndeti, 2016). Despite of the policies put in place, the government should show commitment of the implementation of these policies and more embassies put on mobilization of health care providers in

UHC.

2.2.4 Amenities and Health Facilities Readiness

According to Kenya (2015), it shows that Sub-Saharan Africa has numerous health issues which include low quality of health care services. The managers employed have shown lack of qualified skills to run the health facilities and the drugs supplied are not able to meet the needs of the community. Also, the health care providers lack continuous training leading to misappropriation of funds which has caused shortage of drugs in health centers especially dispensaries and community clinics. According to 2010 constitution, Kenyan facilities are arranged in 5 different levels which include community, dispensary, facilities and referrals hospital which are both level 4 and 5. In 2013, the government did away with user fees in lower facilities and allocated some resources to support the running of facilities which brought about giving health care services required in the community. MOH (ROK) 2015) Reported that there are a lot of challenges facing Kenya as county government example high cost of drugs and equipment, high cost on medical care, lack of medical care, shortage of drugs, human resource shortage and lack of specialists which is at 4000 instead of 7500 and specialist doctors based in Nairobi.

Analysis of county statistical abstract shows that 10,600 health facilities in Kenya with half in faith based and private based, this shows that most of them are health centres and dispensaries which implies that 25 health facilities serves a population of 100,000 population. With public facilities rendering poor services which intern allows the private facilities to take over the market by (Mutisya, Otieno, 2021) Despite the government showing efforts to support and establish health care facilities there is need to equip the amenities with required resources, equipment, drugs and enough health care providers (Kenya, 2015). In relation to implementation of UHC, Ethiopia came up

with a policy in health service delivery that establishing Pharmaceutical Fund and Supply Agency (PFSA) which allowed the population easy and more access to vaccines, laboratory services and genetic medicines that are cheaper and effective (Admasu, 2016).

Uganda showed poor maintenance of health facilities, overcrowding in health facilities which are poorly kept / unclean and run down, 50% of them lack electricity and running water, lack of basic drugs, no ambulance services in case of emergencies, low number of facilities with no laboratory services and lack structures of data collection, reporting and feedback (Doctor, Nkhanasalimuand Abdul Salam-Anibilowo, 2018). Therefore, it is important for the Kenya government and counties to make policies that will assist in stocking the health facilities with medicines to improve the health care of the communities. Nakuru County was rated as a county leading in affordable and quality healthcare, but most of the Sub-County's population comprises of high class, middle class, low-income class which includes slums and pre-urban areas with health facilities lacking essential drugs and vaccine, inadequate trained health care providers, the community travel long distance to visit the health facilities and poor infrastructure therefore there is more need to address shortage of equipment in health facilities, low medical providers and high cost of medical services (ROK, 2013).

2.2.5 Role and Satisfaction of CHVs

In Kenyan community, health care volunteers are grouped under community strategy whose intent is to act as a bridge on health issues from the community to health care facilities. In 2010, health care volunteers were declared as a new cadre whereby, its intent needed clarification and what they are trained to do (KHF, 2018). In Rwanda and Ethiopia healthcare volunteers are popular because they offer services to the community like other health cadres. WHO has supported the role of CHVs because they play an

important role in development of millennium goals which has contributed to the reduction of mortality rate, improvement of maternal health, combat malaria and HIV/AIDS in the community(Zulliger, 2017).

Most of the studies in primary health care have concentrated on contribution to delivering community need based essential services but little investigations have been done on the role of health care volunteers and their additional contribution to health matters. As years goes by, the cadre has grown in importance because they have helped many communities in regard to health care issues (Mohajer, 2018). Ethiopian health care volunteers' go through trainings in health education, prevention of diseases that are communicable, house hold sanitation and environment health. The health care volunteers are treated as government employees, with regular salaries, benefits, continues mentorship and recognition which has led to progression in achieving MDGs goals (Zulliger, 2017).

Some reviews were done on how the volunteers can improve access and health services that are essential in low- and middle-income countries(LMICs). The study showed that the services offered by the CHVs is not of low quality as compared to health care providers however, they were poor in counseling services and diagnosis that can be achieved by empowering them continuously by support supervision and continues trainings. Also, it showed that curative, preventive and promotive services given by CHVs was as good as compared to health care providers employed therefore, implementation to be successful it needs policies that are strong and continues support from managers(Mohajer, 2018).

Poor definition of roles, inadequate regular supervision and poor distribution of resources acts as a barrier for health volunteer programmes to succeed in many countries (Singh,2018). Community Health Volunteers representation is not well

defined whether they are represented by NGOs or community health system hence leading to confusion of accountabilities and responsibilities in turn making it difficult to give them the support they require (Tulenko, 2013). The community health volunteers get opposed due to other cadres seeing them as a threat to take their salaries and job security. Although Kenya has tried to integrate them in salaries, other counties have not professionalized them into health system. Most of CHV programmes are supported financially separately therefore making it a challenge to meet UHC agenda but plans are ongoing to coordinate and harmonize the health system to attain UHC (Oshin, 2013). Research shows 400 million People lack access to essential services in health care therefore, CHV workers are to bring solution to implementing UHC but without proper planning and poor investment willed to the country not able to achieve its goal (Gilmartin, 2017).

2.3 Theoretic Framework

The study was based Attrition theory developed by (Walshe and Rundall, 2001). The theory has remained paramount in healthcare system administration particularly through identifying the failures and successes of a health program. However, it is not completely developed as health care management theory; it assumes that the system can be improved by understanding that particular error in the health system “Organizational inertia” & cynicism. Therefore, by understanding these errors, managers in health can learn to foster a positive work environment and the end result improve employee reaction to healthcare errors. The theory has contributed more in management of health care system’ To Err is Human, Building Safer Health Care System, Peter son’s’ 2009. All health care managers use the theory because it makes patients feel safe in the environment of hospital and safe work environment that is positive for health care providers. Thereby, health care providers take errors positively and improve in them

while building patients and health care providers themselves. Other scholars have used attrition theory to encourage student not to give up on higher learning in terms of perceptions.

2.3.1 System Theoretic Approach

The study was based on systems theoretic approach by Chuang and Inder (2009). The theory applies the safety of patient & healthcare quality is important in any healthcare system. This reflects that improved outcome of healthcare should be based on appreciation of the whole system that contributes to the outcome of it and it shows improved quality throughout the healthcare systems. System theory relies on two concepts; control and communication hierarchy and emergency, if they are relied on well, they will be led to ultimate achievements properly. Through the approach reporting system overall effectiveness of accreditation, reporting system measurement for bringing in quality care is discovered and weakness in a system is identified and efforts are made to improve it.

Accreditation system was found in other studies to provide better and quality outcomes in nursing care leadership changes that are positive, support and commitment, staff involvement and quality management that boost outcomes related to training in health care therefore if system theoretic approach is used it will bring quality improvements in healthcare. The theory has been used by other scholars to see the picture on the systems involved and how they affect each other

2.4 Concrete Framework

The conceptual framework (figure 1) is in relation to the objectives in literature review, it shows the relationship of independent variable, dependent variable and intervening variables. The independent variables explain the capacity of health care providers, the gaps in health care provision, amenities and health facilities readiness and role and

satisfaction of health care volunteers. Dependent variables bring outcomes on health care providers readiness of in implementation of UHC.

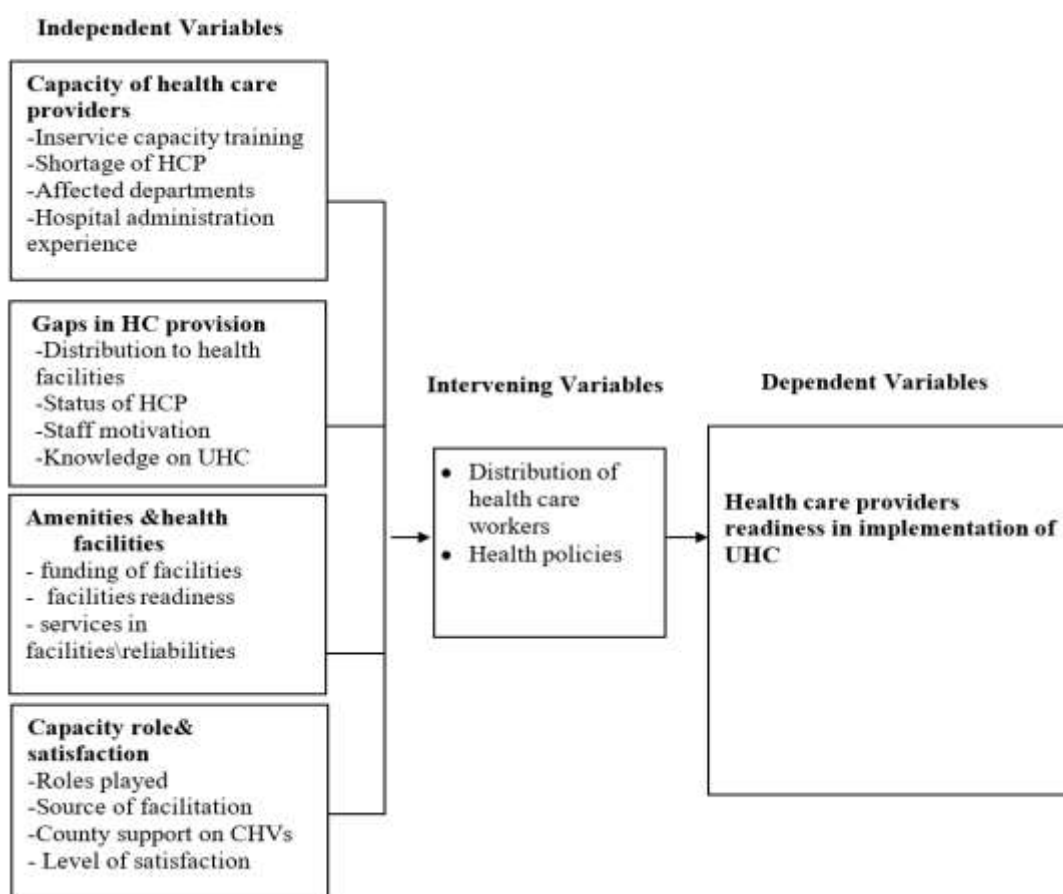


Figure 1 Conceptual framework

2.5 Critical Review

A study done in 2018 reflected unfamiliarity of UHC and defined it as global movement, which interprets that little has been done to create awareness of UHC (Koon and Ndeti, 2016). A study done in Kenya on health care providers also showed that we have unsatisfied health care providers as compared to required number by WHO requirements (MOH, 2014). Which shows little has been done on investment on health care providers.

2.5.1 Knowledge Gaps

Literature review has shown a lot of gaps in health care providers, according to Lopes, 2017 these gaps are due to rapid attrition rates and poor distribution of health workers

also by (Campbell 2016). Research by MOH and in other international agencies have shown average skilled gaps in specialization where nurses had no idea what universal health is all about. This is proving that little has been done to prepare health care providers in UHC. Although Kenyan government has come up with policies to support health care providers in giving them help loans to go to schools but little has been done to mobilize the students to join health careers in the country to increase the number of health care providers. A country like Rwanda, has come up with ways to increase these numbers by partnering with United States Medical training university to fill these gaps.

Ethiopia increased their health care providers by training more health care volunteers on preventive and promotive to fill the gaps by giving them salaries and other benefits. The government established several Medical Universities which they assisted in paying tuition and accommodations for health students. Upon completion they are required to work in public hospitals bridging the health care provider gaps as compared to Kenya. The county government has opted to employ health care providers in contract terms with very insufficient salaries hence making health care providers move to other counties. However, literature done shows attrition and migration of health care providers but it is not clear which categories are affected and how prepared our health care providers are in terms of training of UHC and which departments are affected, also there is no literature available to show the number of health care providers who are leaving the departments and why they are leaving. Health facilities and amenities, shows that the government and county government has shown a lot of efforts in supporting the facilities but no literature to show why most of the health facilities lack equipment and drugs.

CHAPTER THREE

METHODS AND MATERIALS

3.1 Introduction

The section provides the methodology applied in this research. It comprises the design of the research, study location, population targeted by the study, sampling techniques, techniques of the research, research instruments, procedures for the collection of data, procedure for analysis of data, and ethical considerations.

3.2 Design of the Research

The research adopted a cross-sectional design. It involves looking at people who are similar in characteristics but have different interests which allows the researcher to look at numerous characteristics at once while providing information about what is happening in a current population (Barnett et al, 2010). The design entailed both quantitative and qualitative research approaches to gather feedback from different categories of respondents.

3.3 Location of the Study Zone

The study was conducted in Nakuru West Sub County with approximate population of 206,695; the sub-county is divided into six wards. It has the total number of 45 health care facilities and 332 health care providers (DHIS, 2019). Nakuru West Sub County represents most of the Sub Counties in Nakuru City which consists of high class, middle class, low- income which includes slums and pre-urban areas.

3.4 Target population

Health care provider staff in Nakuru west which has a total estimate of 332 was as provided in table 3.1.

Table 3.1 Target population

Ward	Population	Number of Facilities	Number of HCPs	Number of CHVs
Barut	11899	4	6	30
Kaptembwo	85144	7	19	45
Kapkures	16470	4	16	12
Rhonda	29071	4	20	48
London	34375	15	28	45
Shaabab	29739	11	13	50
Total	206698	45	102	230

3.5 Procedures for sampling and Size of the Sample

3.5.1 Sampling Size

The Sample size (Fisher and reviewed) by Mugenda and Mugenda (2003) involves the calculation as shown below.

$$n = \frac{N}{1 + Ne^2}$$

Where **n** refers to the size of the sample, **N**(206698) is the population that is targeted and **e**(5%) is the desired level of precision or confidence level.

The calculations for the sample size are displayed as follows;

$$n = \frac{206698}{1 + 206698(0.05)^2} = 399.2 \approx 399$$

The researcher considered adding 25% of the sample size to cater for non-response.

$$399.2 + 25\% = 499.97 = 500 \text{ people}$$

Therefore, the sample size for the study will be 500 respondents (table 2).

Table 3.2 Distribution of the Sample Size

Ward	Sampled Facilities (25%)	Sampled KIs(25%)	Sampled HCPs(25%)	Sampled CHVs(25%)	Sampled Community Members
Barut	1	1	2	8	21
Kaptembwo	2	2	5	11	150
Kapkures	1	1	4	3	29
Rhonda	1	1	5	12	51
London	4	4	7	11	60
Shaabab	3	3	3	13	52
Total	13	13	26	98	363

3.5.2 Sampling procedures (Techniques)

Stratified sampling was used on the selected facilities from different six wards to get the required sample, stratified sampling was also used for the selection of the health care providers from different cadres who responded to structured questionnaires which were self-administered and purposive sampling for the key informants based on the knowledge, experience of the phenomenon under study and the most senior respondents with the assumption that they had the information a researcher required. A convenient sampling technique was used to sample CHVs to more on the role played by them in implementation of UHC and their satisfaction in relation to implementation of UHC and Focused Group Discussion was on community members to inquire adequacy of services available and offered in the sampled health facilities at the time of the study.

3.6 Instruments for Data Collection

The researcher administered questionnaires which were self-administered to HCPs and CHVs to inquire more on objective one on the capacity of HCP and CHVs in the role they play and their satisfaction on implementation of UHC while the checklist inquires more on health facilities amenities and readiness in objective two on

implementation of UHC. Interviews schedules were used to collect in depth information from the hospital administrators who were the key informants for the study assuming they had the researcher's information he required the tool was interview administered. In addition, the researcher also used Focused Group Discussion (FGDs) to gather the adequacy of health services offered in the facilities to the community members who were among the patients served in the selected health facilities and the tool was self interview.

3.7 Piloting of the Research

Pilot test was conducted to detect weakness in instrumentation and provide Proxy data for probability sample (Kothari, 2013). Piloting was done on the neighboring Nakuru East Sub County because they had the same characteristics as Nakuru West; the population consists of the lower-level population, middle- and upper-class population. 80% UCL approach on sample size calculation identified that a pilot trial sample size between 20 and 40 would minimize for study sample size of 80-250 corresponding to a standardized effect size of 0.4 and 0.7 (Whitehead and Campbell, 2015).

3.7.1 Study Instrument Validation

When a study tool or instrument measures what it is expected to measure, this is referred to as Validity. It is tested through questionnaires administered to a group of respondents who are not part of the study to test the information collected and enable the researcher to refine, redesign and re-write the questionnaires if need be and the assistance of statistical. For the interview guide also, can be adjusted, if need be, to ensure all information required is captured.

3.7.2 Reliability of Data Collection Tools

The consistency of an instrument is said to be reliable when it provides consistent results after being used again and again (Mahajan, 2017). Therefore, the reliability of

the tools on data collection was tested by use of Cronbach's Alpha which was found to be 0.845, exceeding the recommended threshold of 0.7. This implies that the data collection tools were fit for the study as they were considered to be reliable.

3.8 Analysis of Data

The study yielded both qualitative from focus group discussions and interview as well as quantitative data from questionnaires. Qualitative data was analyzed using content analysis that entailed categorizing the feedback thematically. Quantitative data collected was coded and entered into Statistical Package for Social Sciences (SPSS) computer software of 23rd version. Descriptive statistics namely mean, standard deviation, frequency and percentage were used and the results presented in tables, bar graphs. Inferential statistics created by Charles Spearman that test the relationship (correlation) between variables was used to determine the co-relation between the perception on the healthcare facilities readiness, the role played by CHVs and the satisfaction level of the CHVs and the successful implementation of the UHC. All the tests were performed at 95% (P=0.05) level of significance.

Table 3.3 Operationalizations of Variables

Variable	Indicator	Data Collection Instrument	Analysis tool used
Dependent variable			
Providers readiness in implementation of UHC	Health care providers	Questionnaire	Descriptive statistics
Independent variable			
Capacity of healthcare providers	In-service training	Questionnaires	Descriptive statistics
	Shortage of HCPs	Interviews	Qualitative statistics
	Affected departments		
	Hospital administration		

	Work experience		
Gaps in HC provision	Distribution of health facilities	Questionnaires	Descriptive statistics
	Status of HCPs	Checklist	
	Staff motivation		
	Knowledge on UHC	questionnaires	
Amenities and health care facilities	Funding sources and level	Questionnaires	Descriptive statistics
	Facilities readiness	Checklist	Inferential statistics
	Available services		
Role and satisfaction	Roles played	Questionnaires	Descriptive statistics
	Sources of facilitation		
	County support on CHVs		Inferential statistics
	Satisfaction		

3.9 Ethical Approval

Authorization from Mount Kenya University research and ethics committee, a permit from the National-Commission for Science-Technology, and Innovation (NACOSTI) and a certificate form from the County Health Management Team (CHMT) were issued to allow the researcher conduct the study and ethical approval from relevant bodies and the participants signed consent before participation. The researcher ensured consent was gotten from the respondents and the respondents' assurance of confidentiality while she assured them of voluntary participation. To obtain informed consent from the study participants, the research revealed the main goal of the study. A study certificate was sought from the department of health services in Nakuru county that allowed the researcher to access the respondents to collect data.

CHAPTER FOUR

STUDY FINDINGS AND DISCUSSIONS

4.1 Outline

This section shows the results of the research and discussion on the capacity of well-being care providers, gaps in well-being care provision, amenities, and health facilities readiness in preparedness for the implementation of UHC as well as the role and satisfaction of CHVs in the implementation of UHC.

4.2 Rate of Response

The rate of response for this study has been outlined in table 4.4 below.

Table 4.4 Rate of Response

Respondents	Response	
	Frequency	Percent
HCPs	26	100
CHVs	98	100
Community Members	363	100
Hospital administrators	13	100

According to Fowler (2004), this is the rate that equals the proportions of the participants from whom the investigator managed to gather information. The study administered sampled 26 (100%) responded. As for the sampled 98 (100 %) responded. All the 13 (100 %) hospital administrators were successfully interviewed. Out of the 363 community members who were sampled, a total of 363 (100) participated. Kothari (2005) posits that 50 % rate of response is satisfactory, 60% is good while 70 % and above is very good for analysis. This indicates that the rate of response were appropriate for carrying out data analysis.

4.3 Capacity of Health Care Providers

The investigator wanted to determine the capacity of the respondents namely the HCPs,

CHVs, and hospital administrators in health care service provision.

4.3.1 In-service Training capacity of HealthCare Providers

The investigator wanted to determine whether the health facilities had scheduled for continuous training for the health care providers. The HCPs give their answer and the findings are offered in Table (4.5).

Table 4:5 Continuous Training for HCPs

Status	Frequency	Percent
Done	48	65.8
Not Done	25	34.2
Total	73	100

The study revealed that there is continuous training for HCPs in the health facilities according to majority of HCPs (65.8 %) while (34.2 %) said that it is not done. This was found to be a positive observation as it gives the HCPs opportunities to be acquainted with relevant and adequate skills necessary for the implementation of UHC. The findings agree with those of Kabene (2006) who postulates that trained well-being care providers help to meet the raising well-being needs in the community. Mostly there is inadequate lack of well trained and experienced in health care providers globally therefore, to stop this trend there is need to raise awareness that training do not stop once people are in the pick of their professionalism due to continues change of disease trends, dynamics of science it is not static, new inventions are on the raise and young generation and coming up with new skill so training should continue which is instrumental to UHC.

Table 4.6 Trainers for HCPs

Trainers	Frequency	Percent
Donors	7	14.6
Training institute	5	10.4
MOH Trainers	29	60.4
Others	7	14.6
Total	48	100

Further inquiry was done to establish who provides for the trainings for the HCPs. Majority of the HCPs (60.4 %) who participated indicated that the training was done by trainers the Ministry of Health. This was followed by (14.6 %) who stated that it is the donors who conduct the training with only (10.4 %) citing training institutions. However, (14.6 %) said that they get their training elsewhere. More funding is needed in order to equip HCP with new information which is essential to new changes of health programs. For services to be delivered which agrees with Brikci and Scherer (2022) that stipulates Health care provides need to have skills on outreach in community level and ensure quality services are given to the community to improve health and protecting the community.

4.3.2 Health care providers Preparedness for UHC Implementation

The researcher asked the HCPs to give their opinion on whether they thought that the health care providers are prepared for the implementation of UHC.

Table 4.7 Health care preparedness

Status	Frequency	Percent
Ready	37	51.4
Not ready	35	48.6
Total	72	100

The study shown that majority of the HCPs (51.4 %) perceived the health care

providers were prepared for the implementation of UHC while (48.6 %) were of the opinion they are not ready which agrees with Koon, 2016 which speculates that most of the policies put in place have met a lot of violence and disagreement from health care workers which include devolution of reforms and remuneration process threaten UHC implementation. This implies that more needs to be done to prepare for the implementation of UHC

4.3.3 Shortage of health care providers

The HCPs were requested to indicate whether there is shortage of HCPs that could hinder the implementation of UHC, the departments affected and causes of the shortage. The findings are indicated in Table (4.8, 4.9 and 4.10).

Table 4.8: HCPs Shortage

Status	Frequency	Percent
Shortage	66	91.7
No shortage	6	8.3
Total	72	100

According to the popularity of HCPs who partook in the research, (91.7 %), it was clear that there is a shortage of staff with only (8.3 %) stating that there is no shortage. This indicates there are an inadequate number of staffs facilities located in Nakuru West Sub-County is not adequate for the execution of UHC as compared to the population. These findings showed that the Kenyan scenario is not unique as observed by a report from WHO in 2016 showing a limited number of well-being careworkers from 57 countries. The report agrees with (ROK 2013) which speculates that Clearly as a country there is a scarcity of well-being careworkers which has created a challenge causing uneven remunerations among cadres, poor attraction and retention, poor working conditions, and lack of continuous training. According to Kariuki (2018)

Kenya has personnel of health care providers at 63,000 which consists nurses 21,000, clinical officers 3,200, 2,285 doctors, and 1,100 pharmacologists the rest 35,000 are others, while WHO recommends 23 per 10,000.

Table 4.9: Affected Departments

Department	Frequency	Percent
Nursing	8	30.8
Clinical officer	3	11.5
Laboratory	3	11.5
Pharmacy	4	15.4
PHO	3	11.5
More than one department	5	19.2
Total	26	100

The researcher investigated further by asking the HCPs to indicate which department in their health facility was highly affected by understaffing. Majority of the HCPs (30.8 %) who participated indicated that the nursing is highly affected followed by the pharmacy according to (15.4 %), laboratory (11.5 %), PHOs according to (11.5 %) and lastly clinical officers as cited by (11.5 %). However, the researcher established that the health facilities were critically understaffed as a big proportion of (19.2%) cited that more than one facility was highly affected. The research was supported by MOH, (2014 that stipulates, at the moment there is shortage of health care providers in all cadres those employed are below the required number by WHO, 34,381 nurses employed 2013 as compared to 41,026 according to Kariuki (2018) .Also Kenya has personnel of health care providers at 63,000 which consists nurses 21,000, clinical officers 3,200, 2,285 doctors, and 1,100 pharmacologists the rest 35,000 are others, while WHO recommends 23 per 10,000 as reported by Kariuki 2018.

Table 4.10: Causes of Health care provider shortages

Causes	Frequency	Percent
Attrition	15	30
Lack of incentives	9	18
Migration internal and external reasons	10	20
Poor working conditions	8	16
Ageing population	8	16
Total	50	100

The investigator pursued further by asking the HCPs to indicate what they considered to be the causes of health care provider shortages. Majority of HCPs 15 (30 %) who participated stated that attrition is main cause of health care provider shortage followed closely by 10 (20 %) who cited migration internal and external reasons. Additionally, 9 (18 %) of the HCPs pointed out that lack of incentives was the reason for healthcare provider shortage while an equal proportion of 8 (16 %) cited poor working conditions as well as ageing population as the reasons. Clearly as a country there is a shortage of health care provider which has created a challenge causing uneven remuneration among cadres, poor attraction and retention, poor working conditions, and lack of continues training (ROK, 2013).

4.3.4 Education Level

The investigator pursued to determine the education level of the HCPs for the researcher to establish the efficacy of provision of well-being care amenities to the communal. The response was categorized into various level of education categories. The results are shown in Figure 3.

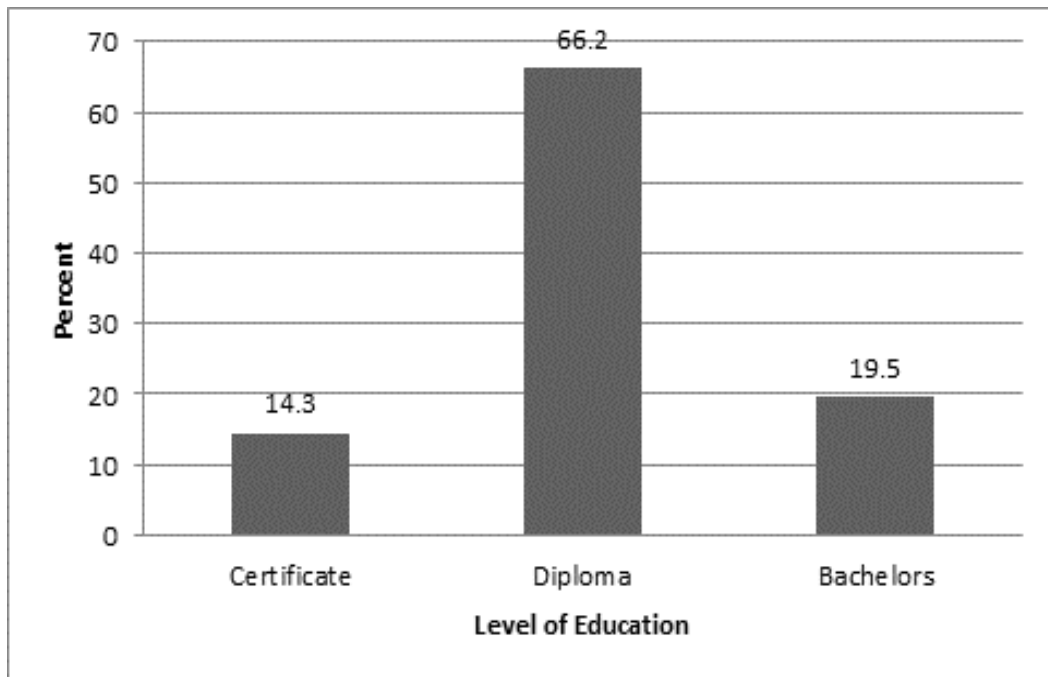


Figure 2: HCPs Education Level

The result (Figure 2), majority (66.2 %) of the HCPs who participated indicated to have progressed with their education up to the diploma level while 19.5 % had attained Bachelor degree and only 14.3 % had certificate. None of the participants had MastersDegree. This implies that most HCPs have moderate academic qualification. According to the recommendation by Kabene (2006), HCPs need to be empowered in terms of education to fill the gaps being experienced.

4.3.5 Distribution of Health care providers by Cadre

The investigatorpursued to determine the cadre of the HCPs. The response was categorized into clinical officer, nurse, PHO, Laboratory technician and pharmacist. The results are shown in Figure4.4.

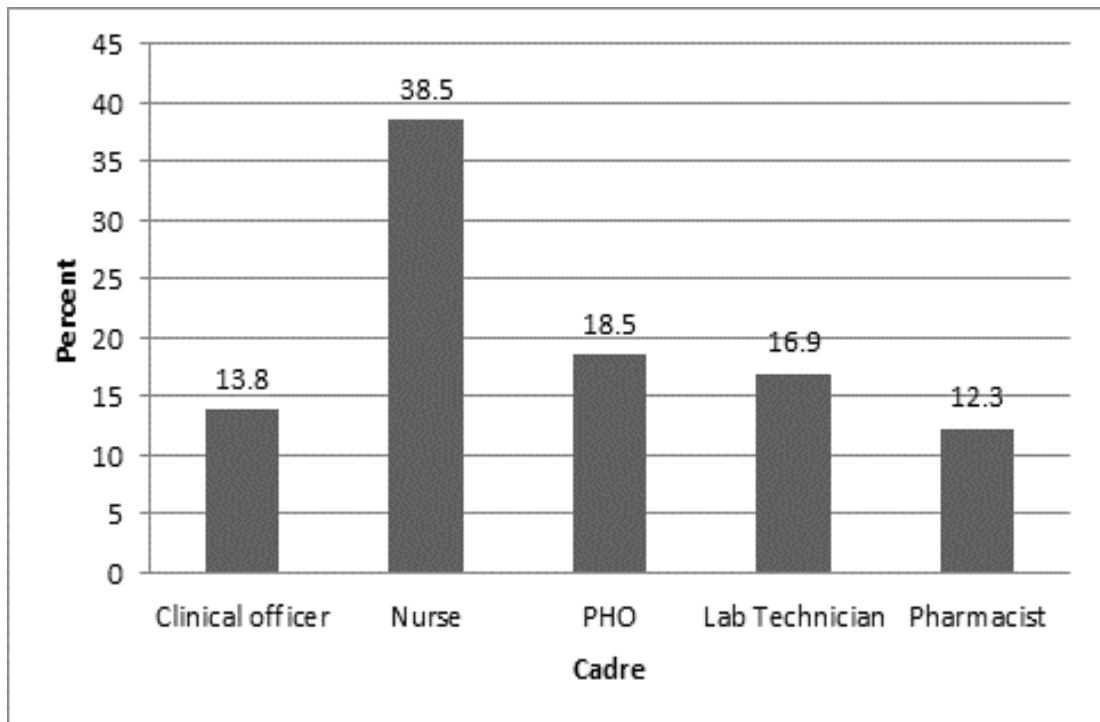


Figure 3: HCPs Cadre

As shown in Figure (3), majority of the participants were nurses (38.5 %) followed by 18.5 % who were PHOs, 16.9% laboratory technicians, 13.8 % clinical officers with 12.3 % stating that they were pharmacists. This is a true indication that nurses play a vital role in the execution of UHC since they are deployed in different sections within a health facility. This agrees with Zurn (2004) and WHO (2010) which stipulates that there is severe investment inadequacy in all cadres, maldistribution of gender imbalances and poor working environment that has caused crises in rural areas and immigrations to developed countries.

4.3.6 Distribution of HCPs by the experience of work

The researcher sought to establish the experience of the work of the HCPs. The HCPs were requested to specify the period in years that they have been in practice. The response was categorized into five intervals namely less than 3, 4 – 6, 7 – 18, 19 – 30 and above 30(Figure 4.5).

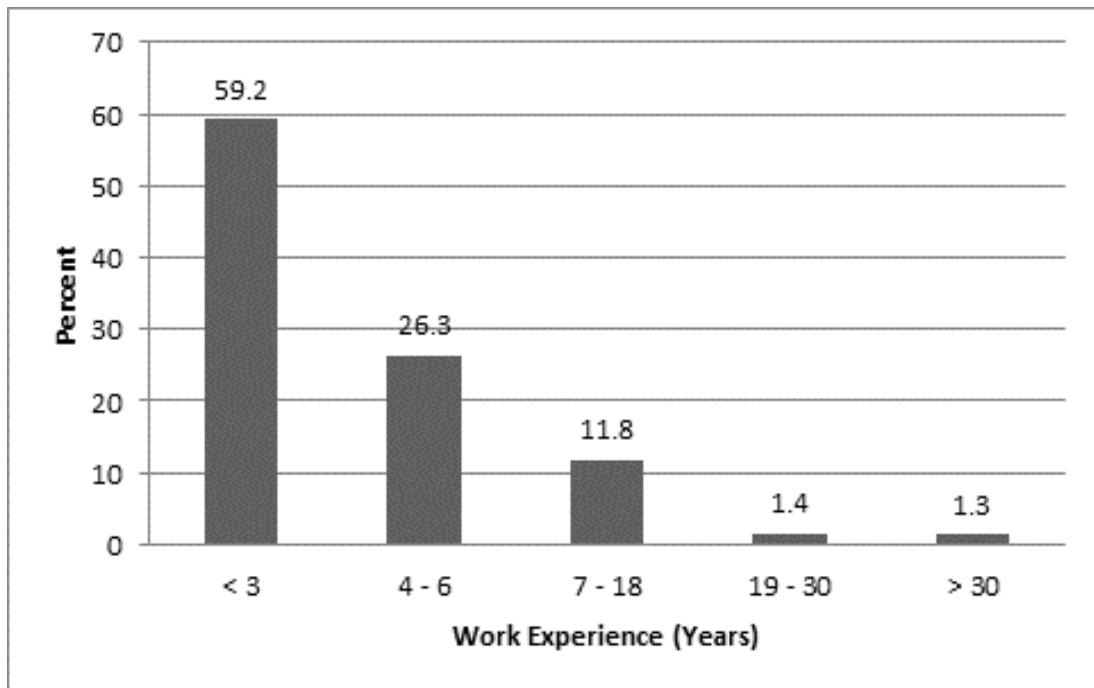


Figure 4: HCPs working experience

The study findings as indicated (Figure 4), majority of HCPs (59.2 %) indicated to have been in practice for less than 3 years while 26.3 % stated 4 – 6 years, 11.8 % have operated for a period of 7 – 18 years with only 1.4 % having served for 19 – 30 year and 1.3 % for more than 30 years. This suggests that the working experience for the HCPs was relatively low and hence inadequacy in professional individual performance. This agrees with Mutuku, Murianki and Mutwiwa (2017) which records that Kenya's shortage in specialized health care providers might cause problems in progressing towards attaining UHC.

4.3.7 Hospital Administrator's Age

The investigator pursued to determine the age of the hospital administrators. During the face-to-face interview that was conducted to the 15 hospital administrators who were the key informants, they were requested to include their age in years. The variable was measured using a scale statistical measure. The response was analyzed and presented

using descriptive statistics using mean, median, minimum, and maximum as the MCT and SD as the dispersion of measures. (Table4.11).

Table 4.11: Hospital administrators' age

Parameter	Years
N	15
Mean	36.5
Median	37.0
Standard Deviation	7.6
Minimum	27.0
Maximum	49.0

The hospital administrators were found to be 36.5 years. The median age was 37 years. The range was found to be 22 years as the youngest hospital administrator was 27 years old and the oldest one had 49 years. The standard deviation was found to be 7.6 years. This implies most hospital administrators were middle-aged persons who had a mixture of experience as well as the energy necessary to execute duties at the managerial levels.

4.3.8 Working Experience of Hospital Administrators

The investigator pursued to determine the working experience of the hospital administrators. The hospital administrators were asked to specify the number of years they had been in administration. The variable was measured using a scale statistical measure. The response was analyzed and presented using descriptive statistics using mean, median, minimum and maximum as the MCT and STD as the dispersion of measures (Table 4.12).

Table 4.12: Hospital Administrators' Experience

Parameter	Years
N	15
Mean	10.1
Median	6.5
Standard Deviation	8.5
Minimum	2.0
Maximum	28.0

The mean years of experience attained by the hospital administrators was found to be 10.1 years. The median duration was 6.5 years. The range was found to be 20 years as the shortest serving hospital administrator had practiced for only 2 years longest serving had 28 years of experience. The standard deviation was found to be 8.5 years. This implies most hospital administrators had relatively little experience which could be an impediment to the implementation of UHC. This agrees with Kenya (2015) which stipulates that managers employed have shown lack of qualified skills to run the health facilities.

4.4 The gaps in health care provision

The investigator pursued to determine the gaps in well-being care provision in health amenities that might affect the enactment of UHC in level 3, 2, and 1 health facilities within Nakuru West Sub-County.

4.4.1 Distribution of HCPs by type of facility

The investigator pursued to determine the type of facilities. The HCPs were requested to indicate the type of health facility where they were stationed. The response was characterized into 3 classes namely public, private and mission hospitals (Figure 5).

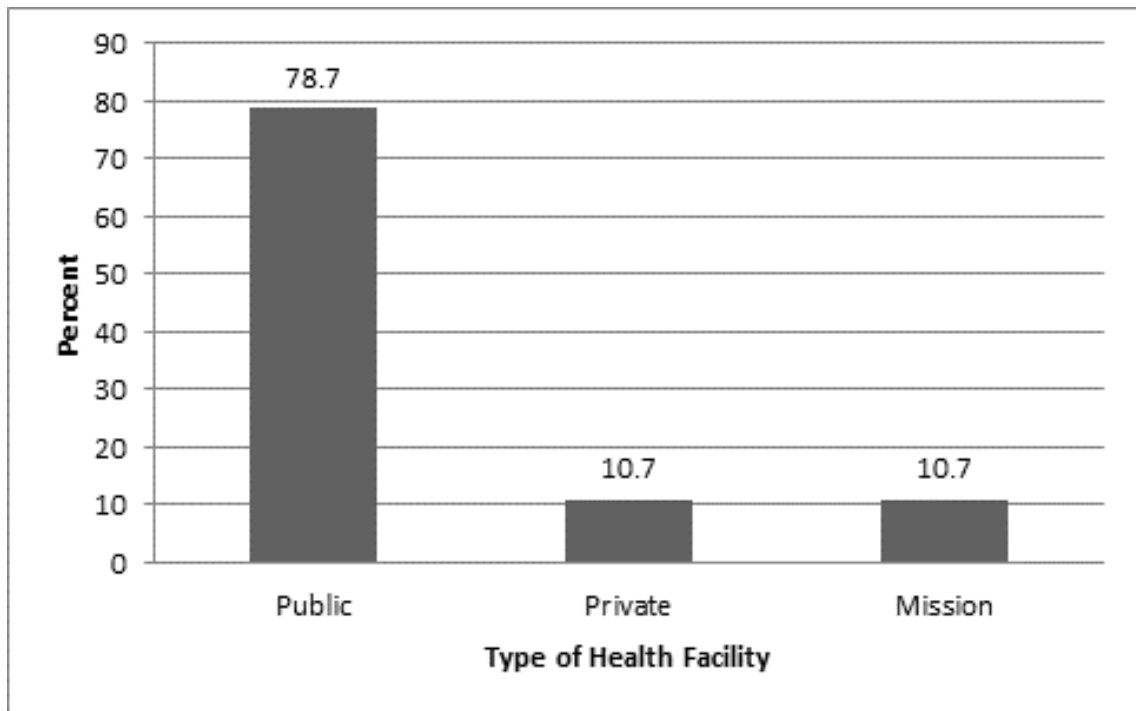


Figure 5: Type of hospital

Majority of the HCPs who participated in the study (78.7%) stated that they were working in public hospital while (10.7%) were from private hospital with a similar proportion of (10.7%) working in the mission hospitals. This implies that the sample was a good representation because UHC is a government strategy that should be spear headed by public health facilities. This agrees with Abuya (2015) which reports that most of the policies have been changed to welcome UHC, which has shown lot of government commitment to the project in bringing in free services in public health facilities like Linda mama. Kenya has worked tirelessly in Accessibility of quality health services, increase in inpatient admission and access of services in outpatient and the country has improved in developing national referral strategy which provides guidelines that are clear on referral processes, reproductive health, maternity health care provision in level 3 and child health adolescent services. In terms of quality of services it offers policy guidelines in non communicable diseases, infections and cancers control to welcome implementation of UHC (Witter, Brikci and Scherer, 2022).

4.4.2 Supervision of healthcare Providers

The investigator pursued to determine how the health care providers are supervised and its frequency. The results on the status of HCPs supervision are indicated in Table 13 and frequency of the supervision shown in Table 4.14 respectively.

Table 4.13: Status of HCPs Supervision

Status	Frequency	Percent
Done	70	97.2
Not Done	2	2.8
Total	72	100

According to the results (97.2 %) of the HCPs who participated in the study, HCPs are supervised with only (2.8 %) with no HCPs supervision in the health facilities where they work. This was considered to be impressive as it supervision is a mechanism that checks the way UHC is implemented.

Table 4.14: Frequency of HCPs supervision

Frequency	Frequency	Percent
Quarterly	60	87
Half yearly	5	8.7
Yearly	3	4.3
Total	68	100

Further interrogation was done to establish how frequent the HCPs supervision was done in the sampled health facilities. Majority of the HCPs who partook in the study (87 %) stated that supervision is done quarterly, that is once after every 3 months while (8.7 %) indicated that it is done twice a year with only (4.3 %) citing once per yearly. This implies that HCPs are regularly supervised to check whether their operations are in line with the procedures necessary for the implementation of UHC.

4.4.3 Staff motivation

The researcher sought to establish the mechanisms used in the facility to motivate the staff members and the way of appreciation of work well done (Table 4.15).

Table 4.15: Incentives given to HCPs

Incentives	Frequency	Percent
Tea for the staff	8	30.8
Lunch for the staff	3	11.5
Time off	3	11.5
Awards	4	15.4
None	5	19.2
Total	26	100

The study revealed that majority of HCPs (62.5 %) considered the provision tea for the staff as the leading incentive given to HCPs in their facilities. This was followed by (7.8 %) of the staff who stated that they are given time off whereas (3.1 %) indicated that they are given awards. However, (20.3 %) stated they there are no incentives given to motivate HCPs. Staff motivation was found to be given to a greater extent in the sampled health facilities which implies HCPs willingness to implement UHC.

Table 4.16: Appreciation for work well done

Status	Frequency	Percent
Appreciated	31	41.9
Not Appreciated	43	58.1
Total	74	100

Further investigation sought to establish whether HCPs are given any form of appreciation after work well done. Majority of the HCPs who participated in the study (58.2 %) stated that they are not appreciated for work well done while only (41.9 %) stated that they are appreciated. This implies that little is done to recognize and appreciate HCPs whose performance is outstanding in the implementation of UHC. This

agrees with Okech and Lelegwa, (2016) which stipulates that 5000 Kenyan specialized doctors have moved to developed countries due to low pay and 3000 to other sectors, living only 3,440 Drs to serve a population of 46 million Kenyans.

4.4.4 Knowledge of well-being care workers on UHC

The researcher sought to establish whether HCPs knew the meaning of Universal HealthCare (Table 4.17).

Table 4.17: Knowledge on UHC

Status	Frequency	Percent
Know	33	54.2
Do not Know	34	45.8
Total	67	100

The research revealed that majority of the HCPs (54.2 %) had the knowledge of what Universal Health Care (UHC) means. However, a proportion of (45.8 %) stated that they were not aware. This was found to be alarming since the proportion of the HCPs without the knowledge was almost half indicating that enough was not done in the sensitization of the UHC among HCPs. This concern supports the findings by Koon and Ndeti (2016) that showed that among the 60 nurses who were interviewed, majority were unfamiliar with the term UHC and defined it as a global movement and how health politics affects policy implementation in Kenya.

4.4.5 Health care providers effectiveness in UHC implementation

The HCPs were asked to give their opinions on whether they perceived the implementation of UHC to be effective by bringing significant changes in health care system in Nakuru County (Table 4.18).

Table 4.18: Effectiveness of health care providers

Status	Frequency	Percent
Effective	69	94.6
Not effective	4	5.4
Total	73	100

According to the result the health care providers was considered to be effective in bringing significant changes in health care system in Nakuru County as pointed out by majority of the HCPs (95 %) with only (5 %) stating that it is not effective. This is in line with Abuya (2015) who observes that health policies have been changed to welcome UHC, which has shown lot of government commitment to the project in bringing in free services in facilities like “Linda mama”.

4.4.6 Health care policy-related constraints

The researcher sought to establish the policy-related constraints facing the health care providers. The health facility administrators were first asked to discuss the existing policies that are in line with the implementation of UHC. Some of the policies cited included the KEPI schedules, ANC, PMTC, HIV policy guidelines, maternal healthcare among others. The researcher further asked the health facility administrators to highlight challenges faced when implementing the above-mentioned policies. Most policies need more facilitations and resources to be put in place to support the policies. The information was gathered using interview schedule which yielded qualitative data that was examined using content examination. Therefore, findings were offered in narrative form. The challenges are discussed in the sections below.

4.4.6.1 Insufficient facilitation

The researcher established that the administrators considered the resources allocated to

the healthcare facilities not to be adequate to support the implementation of UHC. They also stated that the structures in most of the healthcare facilities were not well maintained. The administrators also noted that there is irregular supply of drugs as well as stock outs. There was also the concern about inadequate supply of medical equipments for instance the medical laboratory products. There were no more supplies of mosquito nets in the hospitals for pregnant mothers nor for the children below the age of 5 years are vulnerable to malaria infections. This agrees with the findings by Kenya (2015) which showed that Sub-Saharan Africa has numerous health issues which include health facilities and the drugs supplied not able to meet community needs and supported by Doctor, Nkhanaslim and Abdul Salam-Anibilow, (2018) that Uganda showed poor maintenance of health facilities, overcrowding in health facilities which are poorly kept / unclean and run down, 50% of them lack electricity and running water, lack of basic drugs, no ambulance services in case of emergencies, low number of facilities with no laboratory services and lack structures of data collection, reporting and feedback.

4.4.6.2 Insufficient Staffing

The hospital administrators stated that their facilities did not have enough number of HCPs. Despite the shortages, it was noted that there are no recruitment efforts by the government towards solving the staffing shortages. The understaffing was further affected by transfers and retirement of HCPs who are not promptly replaced. There were concerns about lack of adequate training among HCPs as the administrators cited that some of them lacked necessary skills to implement UHC. This agrees with studies that have shown that there is an inadequate of well-being care providers in all cadres those employed are below the required number by WHO, 34,381 nurses employed 2013 as compared to 41,026 according to (MOH, 2014). World Health Organization

recommends 23 well-being workers per 10,000 people but, the country has inadequate numbers of 1 DR, 12 nurses, and 12 midwives per 10,000 persons.

4.5 Amenities and health facilities readiness in implementation of UHC

This section consists of findings that were gathered as the researcher sought to determine health facilities readiness in terms of amenities, equipment and drugs in the implementation of UHC in levels 3, 2, and 1 health facilities within Nakuru West Sub County.

4.5.1 Funding for the health facilities

The investigator pursued to determine the nature of funding that the health facilities get to prepare them for the implementation of UHC. The results are offered in Table 19 for the sources of funds and Table 4.20 for the adequacy of the funds.

Table 4.19: Source of Funding

Source	Frequency	Percent
County government	47	63.5
Donors	7	9.5
Government	4	5.4
None	16	21.6
Total	74	100

Majority of the HCPs who participated in the study (64%) stated that the health facilities were funded by the county governments followed by (9.5 %) who cited donors with only (5.4 %) who stated that they were been funded by the central government. However, (21.6 %) stated that their health facilities were said to receive no funding. This agrees with Isofa, Molyneux, and Goodman, (2017) which shows that the current elected government has worked tirelessly in the progress towards UHC through administration and budgeting process, making sure all the counties are allocated

resources they require while choosing other counties like Kisumu, Isiolo, Nyeri and Machakos to pilot the project before they hand it over to other counties. Agrees with ROK (2013) that Nakuru County was rated as a county leading in affordable and quality healthcare, but most of the Sub-County's population comprises of high class, middle class, low-income class which includes slums and pre-urban areas with health facilities lacking essential drugs and vaccine, inadequate trained health care providers, the community travel long distance to visit the health facilities and poor infrastructure therefore there is more need to address shortage of equipment in health facilities, low medical providers and high cost of medical services.

Table 4.20: Adequacy of the funds

Funding	Frequency	Percent
Very high	6	10.3
High	18	31.0
Low	34	58.7
Total	58	100

The researcher investigated further to establish whether the funds provided were adequate. According to the popular of the HCPs who partook in the study (58.7 %), indicated that the funding was not adequate as they cited that it was low. However, (31.0 %) stated that the funding was high with only (10.3 %) saying that it was very high. The low funding to health facilities implies that provision of quality health services in hindered thus implementation of UHC may not be realized. This agrees with Abuya, Maina and Chuma, (2015)report which states that Kenya is one of the countries in progress of UHC despite the country having inadequate funds.

4.5.2 Health Amenities Readiness

The researcher sought to establish the extent at which the level health facilities would support the implementation of UHC. This focused on the level of health structures readiness for the implementation of the UHC. The HCPs were asked to indicate the degree to which they approved or disapproved with following declaration with regards to the adequacy of the structural/facilities preparedness to the implementation of UHC. The response was categorized into 5 Likert Scale namely; Not at all =1, To a little-degree =2, To a moderate-degree =3, To a great-degree =4, To a Very great-degree= 5. The responses were then summarized using expressive statistics (μ) and (σ) and inferential statistics (Spearman's correlation)(Table 4.21). The result on perception on the level of readiness of healthcare facilities to the implementation of the UHC indicated that most of the healthcare facilities amenities necessary for the implementation of the UHC were still at inadequate state. It was only the level of electricity connection and labeling of the rooms within the health facilities which showed the strongest and statistically significant positive Spearman's correlation with readiness for UHC implementation ($R=0.944$ and $P=0.045$ & $R= 0.922$ and $P=0.038$ respectively).

Table4.21: Health facilities preparedness

Statement						μ	σ	R- valu es	P- values
	1	2	3	4	5				
Access to clean drinking water	11	9.	42.	2	15.	3.	1.	0.08	0.052
		6	5	2	1	2	2		
Access to clean toilet	5.5	5.	32.	3	26	3.	1.	0.89	0.145
		5	9	0		7	1	2	
The offices in the facility are functional	4.1	5.	17.	3	37	4.	1.	0.73	0.064
		5	8	6		0	1	4	
The doors and windows are functional	6.8	9.	17.	3	36.	3.	1.	0.74	0.105
		5	6	0	5	8	2	6	
The floors and roofs are in good condition	3.9	7.	13.	2	46.	4.	1.	0.82	0.100
		9	2	9	1	1	1	2	
Adequate electricity connection	9.9	4.	15.	2	50.	4.	1.	0.94	0.045
		2	5	0	7	0	3	4	**
Adequate ICT facilities	35.	18	15.	1	12.	2.	1.	0.83	0.058
	6	1	9	3	5	5	7		
Adequate internet access	39.	18	8.2	1	16.	2.	1.	0.79	0.062
	7	8	4	5	6	8			
Adequate laboratory services	6.6	22	28.	2	15.	3.	1.	0.86	0.074
		9	6	8	2	2	4		
Adequate store rooms	8.1	23	23	2	21.	3.	1.	0.68	0.105
		4	6	3	3	3	9		
Adequate waste disposal system	6.8	20	14.	3	25.	3.	1.	0.88	0.055
		9	2	7	5	3	4		
Well labeled and accessible rooms	2.7	8	14.	3	40	4.	1.	0.92	0.038
		7	5	40	0	1	2	**	
There is good drainage system	4.1	14	21.	3	28.	3.	1.	0.82	0.083
		9	2	8	7	2	4		

(** Significant two tailed at 0.05)

According to the research results as indicated in Table (4. 21), majority of the HCPs (42.5 %) who partook in the research agreed to a moderate extent that there is access to clean drinking water in the health facilities with 22 % agreeing to great degree and 15.1 % to a very great degree. However, 11 % did not agree at all while only 9.6% agreed to a little extent. The (μ) response was 3.2 with the variation giving a (σ) of 1.2. Since the

mean value is more than 3, it implies that there is access to clean drinking water in the health facilities.

The research pursued to determine whether there is access to clean toilets in the health facilities. The results indicate that the access is moderate according to 32.9 % of the HCPs who participated in the study. A further 30 % of the HCPs agreed to the statement to a great degree with 26 % agreeing to a very great degree. However, 5.5 % of the HCPs agreed to the little extent with only 5.5 % not agreeing at all. The MCT and variation of measures were employed to summarize the results yielding a v of 3.7 and an (σ) of 1.1 respectively. Since the mean response was greater than 3, it is evident that there is access to clean toilets in the health facilities.

On the investigation whether the offices in the health facilities are functional, the majority of the HCPs who partook in the research agreed to a very great-degree (37 %) followed by 36 % who agreed to a great-degree and 17.8 % who agreed to a moderate-degree. However, 5.5 % agreed to a little extent with only 4.1 not agreeing at all. The mean response was found to be 4.0 with a (σ) of 1.1. Since the (μ) reply was greater than 3, it was evident that the offices in the sampled health facilities were considered to be functional.

It was the wish of the researcher to establish the condition of the doors and windows for the structures found in the health facilities. The HCPs were requested to indicate whether the doors and windows were functional. Findings indicate that the majority of the CHVs who partook (36.5 %) agreed to a very great-degree followed by 30 % who agreed to a great-degree and 17.6 % moderate-degree. However, 9.5 agreed to a little-degree with 6.8 % not agreeing at all. The mean response was found to be 3.8 with a (σ) of 1.2. Since the (μ) reply was superior than 3, it was evident that the doors and windows for facilities in the sampled health facilities were considered to be functional.

The investigator further pursued to determine the condition of the floors and roofs for the structures in the sampled facilities. The HCPs were requested to indicate whether they were in good condition. It was found out that majority (46.1 %) of the HCPs who participated in the study stated that they agreed to a very great extent, 29 % to a great-degree with 13.2 % agreeing to a moderate-degree. However, 7.9 % agreed to a little-degree with only 3.9 % not agreeing at all. The MCF and variation of measures were used to encapsulate the results yielding a (μ) of 4.1 and an (σ) of 1.1 respectively. Since the (μ) response was superior than 3, it was evident that the floors and roofs for facilities in the sampled health facilities were considered to be in a good condition.

An investigation was done to find out whether the health facilities had adequate electricity connection. The HCPs were requested to indicate whether electricity adequately connected in the sampled health facilities. It was found out that majority of the CHVs who participated in the study stated that they agreed to a very great extent (50.7 %) followed by 20 % to a great extent with 15.5 % agreeing to a moderate extent. However, 4.2 % agreed to a little extent while 9.9 % did not agree at all. The MCT and variation of measures were used to condense the results yielding a (μ) of 4.0 and (σ) of 1.3 respectively. Since the mean response was greater than 3, it was evident that the electricity in the sampled health facilities were considered to be in a adequately connected.

The researcher went further to establish the adequacy of the Information Communication Technology (ICT) facilities found in the health facilities. The HCPs were requested to indicate whether the ICT facilities were adequate. The results revealed that majority of the HCPs who participated (35.6 %) indicated that they did not agree at all with only 18 % agreeing to a little extent. However, 19 % agreed to a great extent with 12.3 % agreeing to a very great extent while 15.1 % agreed to a moderate extent.

The mean response was found to be 2.5 with a standard deviation of 1.5. Since the mean response was less than 3, it was evident that the ICT facilities in the sampled health facilities were not adequate.

A further inquiry was done by the researcher to establish the adequacy of the internet connectivity in the health facilities. The HCPs were requested to indicate whether health facilities had adequate internet connection. Findings showed that majority of the HCPs who partook (37.9 %) indicated that they did not agree at all with only 18 % agreeing to a little extent. However, 18 % agreed to a great-degree with 16.4 % agreeing to a very great-degree while 8.2 % agreed to a moderate-degree. The mean response was found to be 2.5 with a (σ) of 1.6. Since the (μ) response was less than 3, it was evident that the internet in the sampled health facilities was not adequate accessible.

The researcher went further to establish the adequacy of laboratory services in the health facilities. The HCPs were requested to indicate whether health facilities had adequate laboratory services. Findings showed that majority of the HCPs who partook in the study (28.9 %) agreed to a moderate-degree with 26 % agreeing to great-degree and 15.8 % to a very great-degree. However, 6.6 % did not agree at all while 22 % agreed to a little extent. The mean response was 3.2 with the variation giving a (σ) of 1.2. Since the (μ) value is greater than 3, it implies that there were adequate laboratory services in the sampled health facilities.

A further inquiry was done by the researcher to establish the adequacy of the store rooms in the health facilities. The HCPs were requested to indicate whether health facilities had adequate store rooms. Study findings showed that majority of the HCPs who partook (24 %) indicated that they agreed to great-degree followed by 21.6 % to a very great-degree with 23 % agreeing to a moderate-degree. However, 23 % agreed to a little-degree while 8.1 % did not agree at all. The mean response was found to be 3.3

with a (σ) of 1.3. Since the (μ) response was more than 3, it was evident that store rooms in the sampled health facilities were adequate.

The investigator sought after to determine the adequacy of the waste disposal system in the health facilities. The HCPs were requested to indicate whether health facilities had adequate waste disposal system. Study findings showed that the majority of the HCPs who partook in the study (32 %) indicated that they agreed to a great-degree followed by 25.7 % to a very great-degree with 14.9 % agreeing to a moderate-degree. However, 20 % agreed to a little-degree while 6.8 % did not agree at all. The mean response was found to be 3.5 with a (σ) of 1.3. Since the (μ) response was more than 3, it was evident that waste disposal system in the sampled health facilities was adequate.

A further investigation was done by the researcher to establish whether the rooms in the health facilities are well labeled and accessible. The HCPs were requested to indicate whether the rooms are well labeled and accessible. Study findings revealed that majority of the HCPs who participated in the study (40 %) indicated that they agreed to a very great-degree followed by 35 % to a great-degree with 14.7 % agreeing to a moderate-degree. However, 8 % agreed to a little-degree with 2.7 % not agreeing at all. The mean response was found to be 4.0 with a standard deviation of 1.1. Since the mean response was more than 3, it was evident that rooms in the sampled health facilities were well labeled and accessible.

Finally, the investigator pursued to determine the condition of the drainage system in the health facilities. The HCPs were requested to indicate whether the drainage the drainage system in the sampled health facilities was good. Study findings revealed that majority of the HCPs who participated in the study (32 %) indicated that they agreed to a great extent followed by 28.8 % to a very great-degree with 21.9 % agreeing to a moderate-degree. However, 14 % agreed to a little-degree with 4.1 % not agreeing at all. The

mean response was found to be 3.7 with a (σ) of 1.2. Since the (μ) response was more than 3, it was evident that drainage system in the sampled health facilities was considered to be good. This agrees with Kenya (2015), report showed that Sub-Saharan Africa has numerous health issues which include low quality of health care services. The managers employed have shown lack of qualified skills to run the health facilities and the drugs supplied are not able to meet the needs of the community. Also, the Health care providers lack continuous training leading to misappropriation of funds which has caused shortage of drugs in health centers especially dispensaries and community clinics. Also ROK (2013) showed that health facilities lacked essential drugs and vaccine, inadequate trained health care providers, the community travel long distance to visit the health facilities. The report by Doctor, Nkhanasalimu and Abdul Salam-Anibilow (2018) agrees that poor maintenance of health facilities, overcrowding in health facilities which are poorly kept / unclean and run down, 50% of them lack electricity and running water, lack of basic drugs, no ambulance services in case of emergencies, low number of facilities with no laboratory services and lack structures of data collection, reporting and feedback

4.5.3 Health Facility Readiness for UHC Implementation

The investigator pursued to determine whether the sampled health facilities were ready for the implementation of UHC. The HCPs were requested to indicate status in terms of readiness (Table 4.22).

Table 4.22: Health facility preparedness

Status	Frequency	Percent
Ready	30	40.5
Not Ready	44	59.5
Total	74	100

The research recognized that majority of the HCPs who participated in the study by responding to the question (59.5%) stated that the health facilities where they were deployed were not ready for the implementation of the UHC. However, (40.5%) stated that they health facilities were ready. The report agrees with ROK (2013) which stipulates that Nakuru County was rated as a county leading in affordable and quality healthcare, but most of the Sub-County's population comprises of high class, middle class, low-income class which includes slums and pre-urban areas with health facilities lacking essential drugs and vaccine, inadequate trained health care providers, the community travel long distance to visit the health facilities and poor infrastructure. The report is also supported by (Mutisya, Otieno 2021) Analysis of county statistical abstract shows that 10,600 well-being amenities in Kenya with half in faith based and private based, this shows that most of them are health centres and dispensaries which implies that 25 health facilities serves a population of 100,000 population. With public facilities rendering poor services which intern allows the private facilities to take over the market

4.5.4 Referrals System used by Health Facilities

The investigator pursued to determine the status of the referral systems for the sampled health facilities for the implementation of UHC. The HCPs were requested to indicate whether the facilities had a reliable source of referrals system (Table 4.23).

Table 4.23: Reliability of the referral systems

Status	Frequency	Percent
Reliable	39	54.2
Unreliable	33	45.8
Total	72	100

Majority of the HCPs (54.2%) stated that the referral systems present in the health facilities are reliable whereas (45.8%) stated that they are unreliable.

Table 4.24: Referral foams available in health facilities

System	Frequency	Percent
Ambulance	40	71.4
Taxi	2	3.6
Motorcycle	5	8.9
Other systems	9	16.1
Total	56	100

The researcher went ahead to inquire the HCPs to indicate the referrals systems that were available in the health facilities. Majority of the HCPs who participated in the study indicated that their health facilities used the ambulance as the referral system. However, (3.6%) stated that they use taxis, (8.9%) motorcycles whereas (16.1%) cited other means of transport systems were used.

4.5.5 Health services available in the health facilities

The researcher went ahead to establish whether the available health services in the sampled health facilities are delivered with the adequacy that is required by the universal health care. The information (Table 4.25) was gathered from the focus group discussions that involved members of the community who are the designated beneficiaries of the UHC implementation.

Table 4.25: Health Services available

Service	Percent	
	Adequate	Not Adequate
vaccine-preventable diseases treatment and prevention	93.3	6.7
Management of acute (ARI) including pneumonia	75	25
treatment and prevention of malaria	24.1	75.9
interventions for procreative well-being to address adverse maternal/neonatal outcomes	82.8	17.2
tuberculosis control and prevention	76.7	23.3
acute diarrheatreatment and prevention	81.5	18.5
HIV/AIDS and STI management and prevention	89.3	10.7
nutritional deficiencies and malnutrition treatment and prevention	50	50
management and prevention of ear,etes and skin problems	17.9	82.1
common injuriestreatment and emergencies	65.5	34.5

As shown in Table (4.25), majority of the focus groups (93.3 %) stated that there is adequate preclusion and management of vaccine-preventable diseases in the health facilities with only 6.7 % in dispute. Similarly, the management of (ARI) was found to be adequate according to majority of the focus groups (75%) while 25% indicated that they are not adequate. The study also revealed that there are adequate reproductive health interventions according to 82.8 % while 17.2% stated that they are not adequate.

It was also established that there were adequate services in the anticipation and controlling of HIV/AIDS and (STIs) according to 89.3% of the community members while only 10.7 % said that they are not adequate. Similarly, the prevention and control of tuberculosis by the health facilities was found to be adequately done according to 76.7% of the community members who participated in the study while 23.3% stated that

it is not adequate.

In the same light, acute diarrhea diseases including cholera were found to be adequately prevented and treated according majority of the community members (81.5 %) who participated in the study while 18.5 said that it is not adequate. As for the management and prevention of malnutrition and nutritional deficiencies, the services were found to record a mix reaction from the members of the community with 50 % saying that they are adequate and a similar proportion of 50 % saying that they are not adequate. However, the treatment of common injuries and emergencies was found to be slightly better as 63.3 % of the community members stating that the services are adequate while 33.3 % stated that they are not. On the contrary, the community members raised concern on the services pertaining malaria prevention and treatment being inadequate precisely the use of Insect Treated Nets (ITNs) and active case administration as cited by the majority 75.9 % with only 24.1 % saying that they are adequate. Similarly, the members of the community who participated in the study express their dissatisfaction with the services rendered in the hospitals for the treatment and management of common eye, ear and skin conditions by the majority (82.1 %) saying that they are not adequate as opposed to only 17.9 % who said that they are adequate

4.6 The role and satisfaction levels of CHVs in the implementation of UHC

4.6.1 Roles played by CHVs

The researcher sought to establish significance of the roles played by the CHVs to the implementation of UHC based on the participants perceptions. The participants were requested to indicate their awareness on the roles of the CHVs to the implementation of UHC. The response was categorized into 5 Likert Scale namely; Not at all =1, To a little-degree =2, To a moderate-degree =3, To a great-degree =4, To a Very great-degree = 5. The response was then summarized using expressive statistics named (μ)

and (σ) , and inferential statistics using Spearman's correlation (Table 4.26). The result on the relationship between the roles played by the CHVs and the successful implementation of the UHC indicated that all the roles performed by the CHVs had potential significant contribution to the implementation of UHC based on high R values and P values of <0.05 .



Table 4.26: Role Played by CHVs in the UHC Implementation

Statement	1	2	3	4	5	μ	Σ	R-Values	P-Values
susceptiblepopulaces and healthcare systems have a connection	4.3	30.4	29.0	18.8	17.4	3.1	1.2	0.962	0.004**
easy facilitation of social service system and healthcare	1.4	24.6	40.6	20.3	13.0	3.2	1.0	0.889	0.004**
Sufficient care and care changeovers for susceptiblepopulaces	8.8	17.6	36.8	25.0	11.8	3.1	1.1	0.924	0.035**
Reduction of social segregation among patient populaces	10.6	24.2	28.8	16.7	19.7	3.1	1.3	0.942	0.025**
registering individuals into health coverage covers	36.2	26.1	15.9	8.7	13.0	2.4	1.4	0.992	0.044**
Promoting cultural competency among healthcare specialists serving susceptible populations	7.1	28.6	27.1	20.0	17.1	3.1	1.2	0.899	0.050**
Enlighteningwell-being system providers and shareholders about community health needs	4.4	17.6	26.5	23.5	27.9	3.5	1.2	0.956	0.005**
Providing ethnically appropriate well-being education on topics related to chronic illness prevention, physical action, and nutrition	6.0	9.0	20.9	34.3	29.9	3.7	1.2	0.962	0.025**
Advocating forsuitablecare services	5.9	13.2	33.8	35.3	11.8	3.3	1.0	0.989	0.004**

Gathering data and transmitting info to legislators to inform policy change and development	10.4	10.4	32.8	14.9	31.3	3.5	1.3	0.968	0.004**
Providing informal therapy, well-being screenings, and transfers	4.3	4.3	8.7	52.2	30.4	4.0	1.0	0.924	0.004**
Capacitybuilding to address well-being issues	2.9	5.9	35.3	30.9	25.0	3.7	1.0	0.946	0.001**

(** Significant two tailed at 0.05)

According to Table 26, the majority of the CHVs who partook in the research recognized that they play the role a key role in the enactment of UHC by creating connections between susceptible populations and well-beingcare systems to a little extent (30.4 %), 29.0 % moderate-degree while 18.8 % stated that they do it to a great-degree and 17.4 % to a very great-degree. However, 4.3 % stated that they do not do it at all. The MCT and variation of measures were used to summarize the findings yielding a mean of 3.1 and an SD of 1.2 respectively. Since the (μ) response was superior than 3, it was clear that the CHVs play a key role in creating awareness between susceptible populations and wellbeingcare systems.

The researcher also sought to establish whether the CHVs facilitate healthcare and social service systems in the navigation of the targeted areas. The majority of the CHVs who partook (40.6 %) in the research claimed that they do it to a moderate-degree followed by 24.6 % who cited to a little-degree, 20.3 % to a great-degree, and 13 % to a very great-degree. However, 1.4 % stated that they do not do it at all. The response was summarized into a (μ) of 3.2 and an SD of 1.0. Since the (μ) reply was better than 3, it

was clear that the CHVs play a key role in facilitating healthcare and social service system navigation.

The investigator also pursued to establish whether the CHVs manage care and care transitions for vulnerable populations. Majority of the CHVs who participated (36.8 %) in the research claimed that they do it to a moderate-degree followed by 17.6 % who cited to a little extent, 25.8 % to a great-degree and 11.8 % to a very great-degree. However, 8.8 % stated that they do not do it at all. The response was summarized into a mean of 3.1 and an SD of 1.1. Since the (μ) response was superior than 3, it was clear that the CHVs play a key role in care management and care changes for susceptible populations.

Additionally, the researcher sought to establish whether the CHVs participate in reducing social isolation among patient populations. The majority of the CHVs who partook (28.8 %) in the study stated that they do it to a moderate-degree followed by 24.2 % who cited to a little-degree, 16.7 % to a great-degree and 19.7 % to a very great-degree. However, 10.6 % stated that they do not do it at all. The response was summarized into a (μ) of 3.1 and an SD of 1.3. Since the (μ) reply was better than 3, it was clear that the CHVs play a key role in reducing social isolation among patient populations.

Additionally, the researcher sought to establish whether the CHVs participate in determining suitability and registering persons into well-being insurance covers. Majority of the CHVs who participated (26.1 %) in the study stated that they do it to a little extent followed by 15.9 % who cited to a moderate-degree, 8.7 % to a great-degree and 13.0 % to a very great-degree. However, 36.2 % stated that they do not do it at all. The response was summarized in to a (μ) of 2.4 and (σ) of 1.4. Since the (μ) response was better than 3, it was clear that the CHVs do not actively participate in

defining suitability and registering individuals into well-being protection plans.

Additionally, the researcher sought to establish whether the CHVs participate in safeguarding cultural capability among well-being care specialists serving susceptible populations. Majority of the CHVs who participated (27.6 %) in the study stated that they do it to a little-degree followed by 27.1 % who cited to a moderate-degree, 20.7 % to a great-degree and 17.1 % to a very great-degree. However, 7.1 % stated that they do not do it at all. The response was summarized in to a (μ) of 3.1 and a (σ) of 1.2. Since the (μ) reply was greater than 3, it was clear that the CHVs play a key role in ensuring cultural capability among healthcare specialists serving susceptible populations.

The investigator also pursued to determine whether the CHVs participate in enlightening fitness system providers and shareholders about communal well-being needs. The majority of the CHVs who partook (27.9 %) in the study stated that they do it to a very great-degree followed by 26.5 % who cited to a moderate-degree, 23.5 % to a great-degree, and 17.6 % to a little-degree. However, 4.4 % stated that they do not do it at all. The response was summarized into a (μ) of 3.5 and an (σ) of 1.2. Since the (μ) reply was superior than 3, it was clear that the CHVs play a key role in enlightening well-being system providers and shareholders about communal well-being needs.

Similarly, the researcher sought to establish whether the CHVs participate in providing ethnically appropriate well-being education on topics related to chronic illness prevention, physical action and nutrition. Majority of the CHVs who participated (34.3 %) in the study stated that they do it to a great-degree followed by 29.9 % who cited to a very-great-degree, 20.9 % to a moderate-degree, and 9.0 % to a little-degree. However, 6.0 % stated that they do not do it at all. The response was summarized into a

mean of 3.7 and an SD of 1.2. Since the (μ) response was superior than 3, it was clear that the CHVs play a key role in providing culturally appropriate well-being learning on topics linked to chronic illness preclusion, physical action and nutrition.

The investigator also pursued to determine the extent CHVs participate in advocating for underserved persons to obtain suitable services. The majority of the CHVs who partook (35.3 %) in the research claimed that they do it to a great-degree followed by 33.8 % who cited a moderate-degree, 13.2 % to a little-degree and 11.8 % to a very great-degree. However, 5.9 % stated that they do not do it at all. The response was summarized in to a (μ) of 3.3 and a (σ) of 1.0. Since the (μ) reply was superior than 3, it was clear that the CHVs play a key role in encouraging for underserved persons to receive suitable services.

In additional, the researcher sought to establish whether the CHVs participate in assembling data and transmitting info to legislators to inform rule change and growth. Majority of the CHVs who participated (32.8 %) in the study stated that they do it to a moderate-degree followed by 31.3 % who cited a very great-degree, 14.9 % to a great-degree and 10.4 % to a little-degree. However, 10.4 % stated that they do not do it at all. The response was summarized in to a (μ) of 3.5 and an (σ) of 1.3. Since the (μ) reply was better than 3, it was clear that the CHVs play a key role in gathering data and transmitting data to legislators to inform policy change and growth.

Similarly, the researcher sought to establish whether the CHVs participate in providing informal counseling, health screenings, and referrals. Majority of the CHVs who participated (52.2 %) in the study stated that they do it to a great-degree followed by 30.4 % who cited to a very great-degree, 8.7 % to a moderate-degree and 4.3 % to a little-degree. However, 4.3 % stated that they do not do it at all. The response was summarized in to a mean of 4.0 and a (σ) of 1.0. Since the (μ) reply was superior than 3,

it was vibrant that the CHVs play a key role in providing informal counseling, health screenings, and referrals.

Finally, the researchers sought to establish whether the CHVs participate in building capacity to address health issues. Majority of the CHVs who participated (35.3 %) in the study stated that they do it to a moderate-extent followed by 30.9 % who cited a great-degree, 25.0 % to a verygreat-degree and 5.9 % to a little-degree. However, 2.9 % stated that they do not do it at all. The response was summarized in to a (μ) of 3.7 and a (σ)of 1.0. Since the (μ) reply was superior than 3, it was clear that the CHVs play a key role in building capacity to address health issues. This agrees with Zulliger, 2017) that volunteers are popular because they offer services to the community like other health cadres and WHO has supported the role of CHVs because they play an important role in development of millennium goals which has contributed to the reduction of mortality rate, improvement of maternal health, combat malaria and HIV/AIDS in the community.

4.6.2 Facilitation of CHVs

The investigator pursued to determine the sources of facilitation for the community health volunteers (CHVs). The CHVs were requested to state the source of their facilitation. Their response was categorized into two categories namely the Non-Governmental Organizations (NGOs) and County Governments (Table 4.27).

Table 4.27: Sources of Facilitation for CHVs.

Source	Frequency	Percent
NGOs	37	55.2
County Government	30	44.8
Total	67	100

From the research results it was recognized that majority of the CHVs who partook in

the study were funded by the NGOs as cited by (55.2%) whereas (44.8%) stated that they were funded by the county governments. This implies that more needs to be done to support the health volunteers by all relevant members. Facilitation of CHVs will motivate them to perform routine duties and enhance effective implementation of UHC in the counties. The report agrees with Tulenko, (2013) which stipulates that Community Health Volunteers representation is not well defined whether they are represented by NGOs or community health system hence leading to confusion of accountabilities and responsibilities in turn making it difficult to give them the support they require.

4.6.3 CHVs Satisfaction with Implementation of UHC

The investigator pursued to determine the levels of CHVs' satisfaction that would ensure successful implementation of the UHC. The participants were requested to designate the level to which their satisfaction would contribute UHC. The responses were categorized into 5 Likert Scale namely; Not at-all =1, To a little-degree=2, To a moderate-degree =3, To a great-degree=4, To a Very great-degree = 5. The reply was then summarized using expressive statistics namely (μ) and (σ) and inferentially using Spearman's correlation. The findings are indicated in (Table 4.28). The findings on the association between the level of satisfaction and the implementation of the UHC indicated that all the CHV's satisfaction needs would have significant contribution on the implementation of UHC based on high R values and P values of <0.05. This agrees with (Zulliger, 2017 that in Rwanda and Ethiopia healthcare volunteers are popular because they offer services to the community like other health cadres. WHO has supported the role of CHVs because they play an important role in development of millennium goals which has contributed to the reduction of mortality rate, improvement of maternal health, combat malaria and HIV/AIDS in the communities.

Table 4.28: Satisfaction of CHVs

Statement	1	2	3	4	5	μ	σ	R-Value	P-Value
Good working relationships with health facility staff	1.5	10.6	18	34.8	35	3.9	1.0	0.847	0.005**
Good working relationships with government health officers	7.6	7.6	44	21.2	20	3.4	1.1	0.986	0.015**
Good working relationships with Civil Society Organization	7.4	17.6	41	22.1	12	3.1	1.1	0.764	0.024**
Adequate community financial support	28.8	21.2	30	15.2	4.5	2.5	1.2	0.6874	0.044**
Good relationships with local community leaders	2.9	15.9	35	26.8	20	4.0	1.1	0.764	0.033**
Availability of equipment	17.4	39.1	19	17.4	7.2	2.6	1.2	0.524	0.005**
CHVs' level of respect in the community	1.4	4.3	28	26.1	41	4.0	1.0	0.642	0.042**
CHVs' training occasions to advancement their skills and knowledge	13.2	11.8	19	27.9	28	3.5	1.4	0.546	0.005**
CHVs' ability to meet community needs	3	20.9	37	17.9	21	3.3	1.1	0.842	0.030**
Way decisions are being made by the CHW in cooperation with CHVs	10	25.7	36	8.6	20	3.0	1.3	0.676	0.024**
CHVs' ability to influence decisions in the health facilities	7.2	24.6	30	24.6	13	3.1	1.1	0.562	0.064**
CHVs' level of respect in the health facilities	1.5	13.6	33	28.8	23	3.6	1.0	0.892	0.015**
Good work ethics of other HCWs	6	3	22	34.3	34	3.9	1.1	0.943	0.045**
Health knowledge of other HCWs members	11.6	11.6	35	23.2	19	3.3	1.2	0.884	0.005**
CHVs' compensation	26.9	34.3	18	7.5	13	2.5	1.3	0.878	0.005**
CHVs' supervisor's recognition of their work	1.5	10.4	34	22.4	31	3.7	1.1	0.892	0.005**
CHVs' opportunities for advancement in health field	7.1	10	23	28.6	31	3.7	1.2	0.902	0.005**

(** Significant two tailed at 0.05)

According to Table 34, when asked about their satisfaction with the working relationships with health facility staff, majority of the CHVs who participated in the study said that they were very satisfied (35.0 %) followed by 34.8 % who were satisfied and 18% who were neutral. However, 10.6 % were not satisfied and 1.5 % was very unsatisfied. The MCT and variation of measures were used to encapsulate the findings yielding a (μ) of 3.9 and an (σ) of 1.0 respectively. Since the (μ) reply was superior than 3, it was clear that the CHVs were satisfied with the working relationships with health facility staff.

The investigator also pursued to determine the CHVs satisfaction with the working relationships with government health officers. Majority of the CHVs who participated in the study were neutral (44 %) followed by 21.2 % who were satisfied and 20% who were very satisfied. However, 7.6 % were not satisfied similar to 7.6 % were very unsatisfied. The MCT and variation of measures were used to encapsulate the results yielding a (μ) of 3.4 and an (σ) of 1.1 respectively. Since the (μ) reply was superior than 3, it was clear that the CHVs were satisfied with the working relationships with government health officers.

The investigator went ahead to find out the CHVs satisfaction with the working relationships with civil society organizations. Majority of the CHVs who participated in the study were neutral (41 %) followed by 22.1 % who were satisfied and 12 % who were very satisfied. However, 17.6 % were unsatisfied and 7.4 % were very unsatisfied. The MCT and variation of measures were used to summarize the results yielding a (μ) of 3.1 and an (σ) of 1.1 respectively. Since the (μ) reply was superior than 3, it was clear that the CHVs were satisfied with the working relationships with civil society organizations.

The investigator went ahead to establish the CHVs satisfaction with community support for instance financial among others. Majority of the CHVs who participated in the study were neutral (30 %) followed by 28.8 % who were very unsatisfied and 21.2 % who were very unsatisfied. However, 15.2 % were satisfied and 4.5 % were very satisfied. The MCT and variation of measures were used to summarize the findings yielding a (μ) of 2.5 and (σ) of 1.2 correspondingly. Since the (μ) response was less than 3, it was clear that the CHVs were not satisfied with the community support.

The researcher went ahead to find out the CHVs satisfaction with the relationships with local community leaders. Majority of the CHVs who participated in the study were satisfied (35 %) followed by 26.8 % who were very satisfied and 15.9 % who were neutral. However, 15.9 % were unsatisfied and 2.9 % very unsatisfied. The MCT and variation of measures were used to encapsulate the results yielding a (μ) of 4.0 and an (σ) of 1.1 correspondingly. Since the (μ) response was greater than 3, it was clear that the CHVs were satisfied with relationships with local community leaders.

The researcher also sought to establish the CHVs satisfaction with the availability of equipment. Majority of the CHVs who participated in the study were unsatisfied (39.1 %) followed by 17.4 % who were very unsatisfied and 19 % who were neutral. However, 17.4 % were satisfied and 7.2 % very satisfied. The MCT and variation of measures were used to summarize the results yielding a (μ) of 2.6 and an (σ) of 1.2 respectively. Since the (μ) response was less than 3, it was clear that the CHVs were not satisfied with relationships with the availability of equipment.

The investigator pursued to inaugurate the CHVs satisfaction with the level of respect that they are accorded by the community. Majority of the CHVs who participated in the study were very satisfied (41 %) followed by 26.1 % who were satisfied and 28 % who were neutral. However, 4.3 % were unsatisfied and 7.2 % very unsatisfied. The MCT

and variation of measures were used to encapsulate the results yielding a (μ) of 4.0 and an (σ) of 1.0 respectively. Since the (μ) response was more than 3, it was clear that the CHVs were level of respect they are accorded by the community.

The investigator also pursued to determine the CHVs satisfaction with the training opportunities to upgrade their skills and knowledge. Majority of the CHVs who participated in the study were very satisfied (28 %) followed by 27.9 % who were satisfied and 19% who were neutral. However, 13.2 % were unsatisfied and 11.8 % were very unsatisfied. The MCT and variation of measures were used to summarize the findings yielding a (μ) of 3.5 and an (σ) of 1.4 respectively. Since the (μ) response was superior than 3, it was clear that the CHVs were satisfied with training opportunities to upgrade their skills and knowledge.

The researcher went ahead to find out the CHVs satisfaction with their ability to meet the needs of the community. Majority of the CHVs who participated in the study were neutral (20.9 %) followed by 21 % who were very satisfied and 17.9 % who were satisfied. However, 20.9 % were unsatisfied and 3 % were very unsatisfied. The MCT and variation of measures were used to summarize the answers yielding a (μ) of 3.0 and an (σ) of 1.1 respectively. Since the (μ) response was equal to 3, it was clear that the CHVs were somehow satisfied with the ability to meet the needs of the community.

The investigator pursued to determine the CHVs satisfaction with the way decisions are being made by the CHWs in cooperation with CHVs. Majority of the CHVs who participated in the study were neutral (36 %) followed by 25.7 % who were unsatisfied and 10 % who were very unsatisfied. However, 20 % were very satisfied and 8.6 % satisfied. The MCT and variation of measures were used to summarize the findings yielding a (μ) of 3.0 and an (σ) of 1.0 respectively. Since the (μ) reply was equal to 3, it was clear that the CHVs' had a mixed reaction to the way decisions are being made by

the CHWs in cooperation with CHVs, which means that they were neutral.

The researcher went ahead to find out the CHVs satisfaction with their ability to influence decisions in the health facilities. Majority of the CHVs who participated in the study were neutral (20.9 %) followed by 24.6 % who were satisfied and 13 % who were very satisfied. However, 24.6 % were unsatisfied and 7.2 % were very unsatisfied. The MCT and measures of variation of measures were used to encapsulate the results yielding a mean(μ) of 3.1 and an (σ) of 1.1 respectively. Since the (μ) response was greater than 3, it was clear that the CHVs were satisfied with the ability to influence decisions in the health facilities.

The investigator pursued to determine the CHVs satisfaction with the CHVs' level of respect in the health facilities. Majority of the CHVs who participated in the study were neutral (33%) followed by 28.8 % who were satisfied and 23 % who were very satisfied. However, 13.6 % were unsatisfied and 1.5 % who were very unsatisfied. The MCT and variation of measures were used to summarize the findings yielding a (μ) of 3.6 and an (σ) of 1.0 respectively. Since the (μ) reply was superior than 3, it was clear that the CHVs were satisfied with the CHVs' level of respect in the health facilities.

The researcher went ahead to find out the CHVs satisfaction with the work ethics of the HCWs. Majority of the CHVs who participated in the study (34.3 %) were satisfied followed by 34 % who were very satisfied and 22 % who were neutral. However, 3 % were unsatisfied and 6% were very unsatisfied. The MCT and variation of measures were used to summarize the findings yielding a (μ) of 3.9 and an (σ) of 1.1 respectively. Since the (μ) response was greater than 3, it was clear that the CHVs were satisfied with the work ethics of the HCWs.

As for the CHVs satisfaction with the health knowledge of other HCWs members, the study recognized that majority of the CHVs who participated in the study were neutral (35 %) followed by 23.2 % who were satisfied and 23.2 % who were very satisfied. However, 11.6 % were unsatisfied similar to 11.6 % were very unsatisfied. The MCT and variation of measures were used to summarize the findings yielding a (μ) of 3.3 and an (σ) of 1.2 respectively. Since the (μ) reply was superior than 3, it was clear that the CHVs were satisfied with the health knowledge of other HCWs members.

As for the CHVs satisfaction with their compensation, the research recognized that majority of the CHVs who participated in the study were unsatisfied (34.3 %) followed by 26.9 % who were very unsatisfied and 18 % who were neutral. However, 7.5 % were satisfied and 13 % were very satisfied. The MCT and variation of measures were used to summarize the findings yielding a (μ) of 2.5 and an (σ) of 1.3 respectively. Since the (μ) reply was less than 3, it was clear that the CHVs were not satisfied with their compensation.

The researcher went ahead to find out the CHVs satisfaction with the recognition of their work by their supervisors. Majority of the CHVs who participated in the study (34 %) were neutral followed by 31 % who were very satisfied and 22.4 % who were satisfied. However, 10.4 % were unsatisfied and 1.5 % who were very unsatisfied. The MCT and variation of measures were used to summarize the results yielding a (μ) of 3.7 and an (σ) of 1.1 correspondingly. Since the (μ) response was superior than 3, it was clear that the CHVs were satisfied the recognition of their work by their supervisors.

Lastly, the researcher sought to establish the CHVs satisfaction with their opportunities for advancement in health field. Majority of the CHVs who participated in the study were neutral (33%) followed by 28.6 % who were satisfied and 31 % who were very satisfied. However, 10 % were unsatisfied and 7.1 % were very unsatisfied. The MCT

and variation of measures were used to summarize the answers yielding a(μ) of 3.7 and an(σ) of 1.2 correspondingly. Since the (μ) response was greater than 3, it was clear that the CHVs were satisfied with the CHVs' opportunities for advancement in health field.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This section provides the study findings' instantaneous in line with the study objectives, conclusions summarized from the study findings as well as the recommendation on the health care providers' readiness for the enactment of UHC in Nakuru West Sub County. The chapter also gives proposals for additional studies that can be conducted to gain more insights in related field.

5.2 Study Findings Summary

5.2.1 Capacity of Health Care Providers

The researcher established that there is continuous in-service training provided by the county Government by MOH to the HCPs which agrees with Kabene (2006) which speculates that trained health care providers have relevant skills that assist in meeting the raising needs of the community, and more needs to be done to attain the remaining target. However, due change in disease trends each day continuous training is key to cater for the outbreaks. Majority of HCPs also revealed readiness of implementation of UHC while a high percentage also showed that they are not ready which agrees Koon (2016) that postulates, most policies put in place have met a lot of resistance and disagreement which threatens the implementation of UHC.

Shortage of HCPs showed that all departments were affected while the highest affected was the nursing department which was due to attrition, lack of incentives, migration internal and external, poor working conditions and ageing population which agrees with MOH (2013). As compared to WHO Nakuru west has a population of 206698, served by 102 HCPs which shows that 1 HCPs per 2,027 population as compared to WHO recommendation of 1 HCPs per 435 population which agrees with MOH (2013) that

shows a shortage of health care providers in all cadres those employed are below the required number. The conclusion showed that there is a shortage of HCP in all cadres and the causes showed that attrition was the main reason. In relation to experience of the managers, the government should employ manager with relevant knowledge in the field. The county government should have mechanism to encourage HCP to continue their education in relevant fields.

Therefore, the researcher recommended that the county government empower HCP by recruiting adequate numbers in all cadres and acquit them with necessary skills to prepare for the implementation of UHC and encourage continues training in relevant fields by providing with resources. Clearly as a country there is a shortage of health care provider which has created a challenge amongall cadres as compared to the population in Nakuru west.

5.2.2 Gaps in Health Care Provision

The study showed that the distribution of health facilities was high in public facilities which imply that the sample was a good representation, because UHC is a government strategy that should be spear-headed by public health facilities. In addition the researcher sort to look at the common service offered in the health facilities whether they were available however, the ward services were limited due to few number of wards build in the lower facilities this agrees with ROK report that there was also limited health facility in high populated areas and Provincial General Hospital is not able to withstand high rising health demand (ROK 2013).

The result showed that the Supervision is done by ministry of health to make sure the procedures put in place are implemented and the project runs smoothly however majority of HCPs complained that they are not appreciated for the work well done

which agrees with ROK (2013) shares the concerns that HCPs are faced with poor attraction and retention, poor working conditions and lack continues training which shows that a lot needs to be done in preparation UHC.

Knowledge on UHC, 54.4% showed that they have an idea of UHC while 45.8% did not, which was alarming hence indicating that much sensitization needs to be done among the HCPs before the rolling down of UHC, which agrees with Koon and Ndetei (2016) that stipulates, majority of nurses were unfamiliar with the term UHC. The informants in interviews done reported that there is inadequate facilitation of the policies put in place to run most of the facilities, limited resources to run the health facilities.

Therefore, in conclusion empowerment of HCP on training of UHC is necessary before implementation and although supervision were done, there is need to raise awareness that training do not stop once people are in the pick of their professionalism due to continues change of disease trends, dynamics of science it is not static, new inventions are on the raise and young generation and coming up with new skill so training should continue which is instrumental and also the staff were not motivated which is a key to empower them over improved health care services. Recommendation is that mechanism of appreciation should be put in place to build their morale and mobilize training on UHC while more resource allocation to facilitate the policies in place.

5.2.3 Amenities and Health Facilities Readiness

Health facilities in Nakuru west are divided to level 1, which is community level, 2 level which is dispensary, level 3 health facilities but the study established that most facilities funding was given by county government which was inadequate hence making the facilities lack essential commodities like drugs and lack of laboratory equipment as supported by MOH (2013) which states that health facilities lack essential drugs and

vaccines and poor infrastructure. Availability of services in the health facilities as reported by the community was quality but other services were not adequately provided for example treated mosquito nets, treatment of ear infections, skin conditions and eye condition hence making the community have challenges in treatment of those infections. The community members were part of the research because they are the stakeholders in UHC implementation.

The conclusion showed that funding were given by the county government but it was inadequate, while amenities necessary for implementation of UHC was still inadequate state and in terms of readiness of health facilities showed that they are not ready. Therefore, adequate funds should be administered to the health facilities and internet services be prioritized to make easy transfer of information and data to all stakeholders.

The findings showed that the level of health facilities readiness in implementation of UHC was in an inadequate state and funding was very low more needs to be done by the county government.

5.2.4 The Role and Satisfaction of Community Health Volunteers

The study established that there is a relationship between CHVs role and implementation of UHC. The CHVs play a key role in generating networks between susceptible populations and well-being care systems, facilitate well-being care and social service system navigation, manage care and care transitions for susceptible populations, reduce social segregation among patient populations, partake in ensuring cultural ability among healthcare specialists and educate health system providers and stakeholders about community health needs therefore, the relationship between the roles played by the CHVs and the successful implementation of the UHC indicated that all the roles performed by the CHVs had potential significant contribution to the implementation of

UHC. Additionally, the research set to find if satisfaction of CHVs had significant contribution to implementation of UHC they provided culturally appropriate health education on topics related to chronic disease prevention, physical activity and nutrition, advocate for underserved individuals to receive appropriate services, participated in collecting data, relaying information to policymakers to inform policy change and development, provide informal counseling, health screenings, and referrals as well as participated in building the capacity to address health issues. However, they were inadequately supported by the county Government. Therefore, satisfaction of CHVs has significant contribution to implementation UHC.

5.3 Conclusions

The researcher concluded, based on the study findings, more needs to be done before the implement the UHC in an effective way due to shortage of health care providers as compared to the population on the ground which was in relation to various reasons that includes but not limited to lack of incentives, migration internal and external reasons, and poor working conditions as well as ageing population which negatively affected health care providers and the most affected departments was nursing while hospital administrators were middle aged persons who had a mixture experience as well as the energy necessary to execute duties at the managerial levels.

As for the knowledge on UHC, a high proportion of HCPs were found not to be knowledgeable as per the 60 nurses who were interviewed, majority were unfamiliar with the term UHC and defined it as a global movement therefore, more needs to be done on training on UHC. In addition the services offered do not meet the needs of the whole population hence more needs to be done. Despite training and supervision being done, the study noted that the health care staff are not adequately motivated or appreciated which is a challenge for them to meet community needs.

As for amenities and health facilities readiness, the study showed that funding was done by the county governments however it was not adequate. The level of readiness on the implementation of UHC indicated that they were still in an inadequate state despite the electricity connection and labeling of rooms. Therefore, the facilities and amenities are inadequate in implementation of UHC and more needs to be done.

The result on the relationship between the roles played by the CHVs and the successful implementation of the UHC indicated that all the roles performed by the CHVs had potential significant contribution to the implementation of UHC and in terms of relationship between the level of satisfaction and the implementation of the UHC indicated that all the CHV's satisfaction needs would have significant contribution on the implementation of UHC.

5.4 Recommendations

- There is need for health care providers to be more empowered by recruiting adequate numbers in all cadres necessary to serve the community Motivation of HCP to continue with their education by allocating more resources to their program and employment of manager with relevant experience to run health facilities.
- There should be a mechanism put in place to appreciate the health care providers in order to build their morale and mobilize training on UHC. As pointed out by the hospital administrators the county government should allocate more resource to health facilities to assist in facilitation of policies in place.
- Adequate funds should be administered to the facilities to assist in maintenance and purchase of drugs and vaccines and internet services should be prioritized to

make it easy transfer of information and data. Additionally amenities are still in a poor state so more should be done to upgrade the facilities before implementation of UHC

- The CHVs play a key role and high significant in implementation of UHC therefore, financial support should be prioritized by the County Government, and compensation mechanism be put in place to motivate them and be provided with equipment necessary for them to serve the community.

5.5 Suggestion for further study

There is need for a study to be conducted to establish the community members' uptake of healthcare services that are covered under UHC. The study should look at the knowledge and attitude expressed by the community towards UHC as well as their health seeking behaviours for key services for instance preventive and curative.

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APPENDICES

Appendix I: Consent Form

Dear Partaker,

I invite you to participate in a research study entitled assessing the preparedness of health care providers and health facilities for the enactment of UHC well-being care in Nakuru west sub County : I am currently enrolled in the HEALTHSYSTEM MANAGEMENT at Mount Kenya University The drive of the investigation is to determine:

Participation in this study is of voluntary will and any question that you will be irritated with can be left blank. There are no anticipated risks in undertaking this study. Responses provided are anonymous as well as confidential.

There are no immediate and direct benefits linked to this research but the findings obtained will help inform decision-makers on the current problems being experienced in UHV implementation

If you agree to participate in this project, please answer the questions on the questionnaire as best you can. It should take approximately 8 months to complete. Please return the questionnaire as soon as possible to enable me to complete the project report.

If you have any questions about this project, feel free to contact *the INVESTIGATOR*, Jackline M, Selvesta 0722697925, Dr Moses Esilaba 0735427404 and Dr Oscar Donde 0725 867478. If you have questions about your rights as a research partaker, please be

in touch with the Chairman, Mount Kenya University, Ethical Review Committee, P.O
Box 342-01000, Thika.

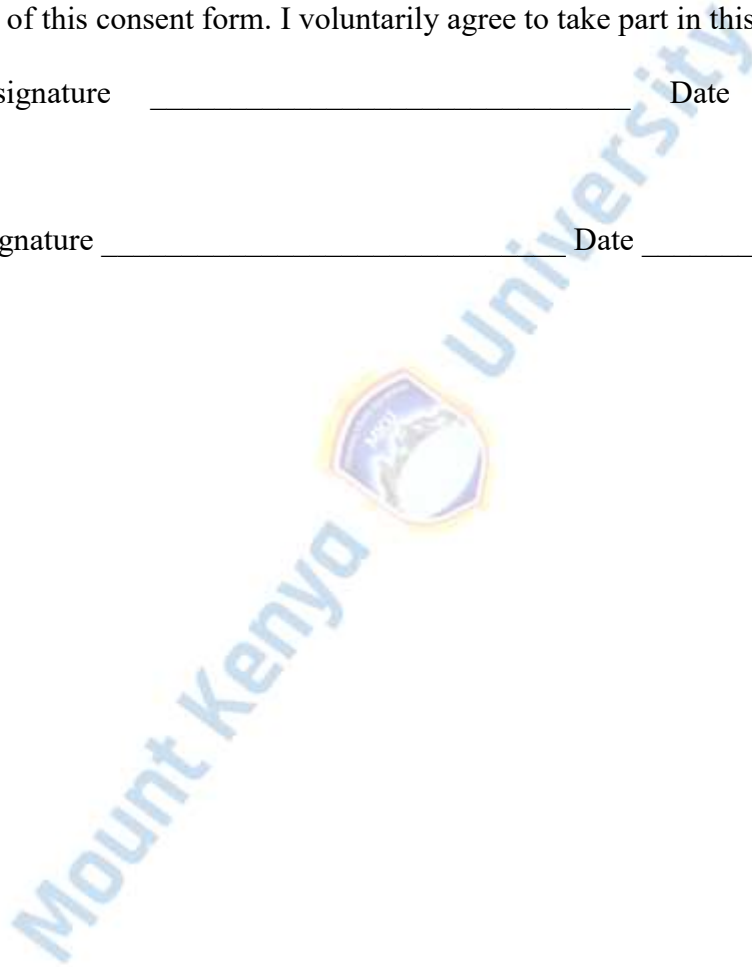
Thank you for your assistance in this important endeavor.

CONSENT

I'm aware of the info provided and I have been granted the chance to enquire any
questions. I understand that partaking in this research is of free. I understand that I will
be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____



Appendix II: Inquiry Form for Healthcare Workers

The survey is premeditated to gather info from the health workers and these are meant for academic purpose only. The questionnaires, focused group discussion, check lists and oral interview. Please complete each section of the questionnaire. Kindly tick the appropriate box that suits your response.

Section A: Information to the Background

1 Your gender Male { }

Female { }

2 Which position do you play in the organization?

i. Clinical officer { }

ii. Nurse { }

iii. PHO { }

iv. Lab technician { }

v. Pharmacist { }

3. what is your highest attained professional level?

i at certificate level { }

ii at diploma level { }

iii BSC { }

iv MSC { }

4. Type of the health facility.....

Public hospital [] Private hospital [] Mission hospital []

5. How many years have worked in this hospital?

Less than 3 [] 4 – 6 []

7– 18 [] 19 - 30 []

More than 30 []

Section B: Health Workforce

6. Does the facility have schedule continues training for the health workers?

Yes { }

No { }

If yes who provides for the trainings?

i. Donors { }

ii. Training institute { }

iii. MOH Trainers { }

iv. Others (specify) _____

7. Do you receive health worker supervisions?

Yes { }

No { }

If yes after how long

i. Quarterly { }

ii. Half-yearly { }

iii. Yearly { }

iv. Others (specify)

If no why? (Kindly indicate) _____

8. i) In your own opinion do you think we have shortages of Health workforce?

Yes { }

No { }

ii) If yes which department is widely affected

i. Nursing department { }

ii. Clinical officer department { }

iii. Lab tech department { }

- iv. Pharmacy department { }
- v. PHO department { }
- vi. Other(specify)_____

iii) And in your opinion what is the causes of healthcare workforce shortages?

- i. Attrition { }
- ii. Lack of incentives { }
- iii. Migration internal &external { }
- iv. Poor working conditions { }
- v. Ageing population { }

9. What mechanisms are used in the facility to motivate the staff members?

- i. Tea for the staff { }
- ii. Lunch for the staff { }
- iii. Time off { }
- iv. Awards { }
- v. None { }
- vi. Other (specify)_____

10. Do you have any form of appreciation after work well done?

Yes { }

No { }

11. Do you know the meaning Universal Health Coverage

Yes { }

No { }

If yes explain UHC? _____

12. In your own opinion do you think the health care workforce is ready for the implementation of UHC

Yes { }

No { }

If no what do you think needs to be done before the implementation?

13. In your own opinion do you think implementation of UHC will bring any change in health care system in Nakuru county?

Yes { }

No { }

If no why? _____

Section C: Structural /Facilities Preparedness

14. What is your source of funding in the facility?

County government [] Donors [] Government [] none []

15. In your own opinion what do you think of the resources allocated

Very high [] High [] low [] None []

16. To what degree do you approve or disapprove with the following statement with regards to the adequacy of the structural/facilities preparedness in the health facilities?

The response is categorized into 5 Likert Scale namely; Not at all =1, To a little-degree =2, To a moderate-degree =3, To a great-degree =4, To a Very great-degree = 5.

Statement	1	2	3	4	5
There is access to clean drinking water					
There is access to clean toilet					
The offices in the facility are functional					
The doors and windows are functional					
The floors and roofs are in good condition					
There is adequate electricity connection					
There are adequate ICT facilities e.g. Computers					
The is adequate internet access					

The laboratory services are adequate					
There are adequate store rooms					
The waste disposal system is adequate					
There rooms are well labelled & accessible					
There is good drainage system					

17. How does the facility dispose their waste

Burn in the incinerator[] Open burning [] County vehicle collection []

Pit dug for disposal [] Others specify _____

18. Where is the source of water?

Through piping [] Public tap [] Bore hole [] Rain water []

Others _____

19. Do the facility have performance tools

Yes [] No []

20. In your own opinion do you think the facility is ready for the implementation of UHC?

Yes [] No []

21. In your own opinion do you think the facility has a reliable source of referrals system? Yes [] No []

22. What are these referrals systems available in the facility

Ambulance [] taxi [] motorcycle [] others _____

23. Does the facility have schedules for continues training of the health workers?

Yes [] No []

If yes how often _____

If not why (specify) _____

End of Checklist.

Appendix III: Inquiry Form for Community Health Volunteers

The survey is intended to gather info from the Community Volunteers and these are meant for academic purpose only. The questionnaires, focused group discussion, check lists and oral interview. Please complete each section of the questionnaires.

Kindly tick the appropriate box that suits your response.

Section A: Information On The Background

1. Your sex Male { }

Female { }

2.. what is your education level?

i at certificate level { }

ii at diploma level { }

iii BSC { }

iv MSC { }

3. How many years have worked as a community health volunteer?

Less than 3 [] 4 – 6 []

7– 18 [] 19 - 30 []

More than 30 []

4. What is your specialization as a CHVs

Specialty of CHW []

Maternal and Child Health []

HIV/AIDS []

Social matters []

General Well-being []

Indefinite []

5. Who facilitates you as a CHV

NGOs { }

County Government { }

6. has the county state done enough to support community health workers

Yes { }

No { }

7. Do you think the county government is ready for implementation of UHC

Yes { }

No { }

8. Kindly tick the appropriate option regarding the CHVs role concerning UHC coverage. Not at-all =1, To a little-degree =2, To a moderate-degree =3, To a great degree =4, To a Very great-degree= 5.

Statement	1	2	3	4	5
The easy linkage between the seek and existing healthcare facilities					
Easy navigation of healthcare facilities and existing social services					
Vulnerable people are well-managed and taken care of.					
Eradication of isolation among the unwell people					
There is a constant enrollment of individuals into health insurance schemes					
Healthcare workers are able to maintain work ethics when serving the general population					
Community well-being needs are constantly communicated to stakeholders in the health system.					
There is a constant provision of well-being education on nutrition, the need for physical activities, and control of NCDs					

Ensuring the disadvantaged receive quality services					
Policymakers are provided with data on time to initiate necessary developmental changes					
Appropriate counseling and screening of health and referrals are available					
Addressing health problems through capacity building					

9. Kindly tick the appropriate aspect of work as a CHV. Use the scale below to answer to this question (1-5). Very-displeased=1, Displeased =2, Neutral =3, Pleased =4, Very Pleased = 5.

Statement	1	2	3	4	5
Relationship at the place of work with fellow colleagues					
Work cohesion with government health officers					
Working relationships with Civil Society Organizations					
Community support - financial or other					
Relationships with local community leaders					
Availability of equipment					
value for the community					
How often do you seek new knowledge and skills					
Capacity to adhere to community needs					
Way decisions are being made by the CHW cooperative					
Your ability to influence decisions by the cooperative					
Your level of respect in the cooperative					
Work ethics of other cooperative members					

Health knowledge of other cooperative members					
Your compensation					
Your supervisor's recognition of your work					
Your opportunities for advancement in health field					

Checklist End



Appendix IV: Key Informant Interview Schedule

1. Background Information

- i. Age;.....
- ii. Gender;
- iii. Years of experience;

2. Discuss the policies that guide you in the implementation of Universal Healthcare Coverage in this health facility?

- i) What are challenges faced when implementing the policies
- ii) What is your suggestion as a remedy to the challenges mentioned in (i) above.

3. In your opinion do you think the health facility has adequate workforce for the implementation of UHC?

- i) In your own opinion, what is the cause of health workforce gaps in the health facilities in Nakuru County?
- ii) What do you suggest as the remedy to the gaps mentioned in (i) above.

4. In your opinion do you think the health facility has adequate structural /facilities preparedness for the implementation of UHC?

- i) What are the challenges facing structural /facilities preparedness of health facilities in Nakuru County?
- ii) What do you suggest as the remedy to the challenges mentioned in (i) above.

5. In your own opinion, what can you say about the role played by the Community health volunteers in the implementation of UHC?

- i) What are some of the barriers facing CHVs in their roles?
- ii) What do you suggest as the remedy to the barriers mentioned in (i) above.

Interview End



Appendix V: Focus Group Discussion for Members of Community

1. What is your knowledge and opinion concerning universal health coverage?
2. Does the healthcare facilities have adequate workforce for universal health coverage?
3. Does the healthcare facilities have adequate structural /facilities preparedness for universal health coverage?
4. What role do the community health volunteers play to support universal health coverage?



Appendix VI: Introduction Letter From the University



SCHOOL OF POSTGRADUATE STUDIES

MHSM/2018/22407

10th July, 2019

*The Director, Research Coordination Division
National Commission for Science, Technology & Innovation
Utali House, 8th & 9th Floor
P.O Box 30623- 00100
NAIROBI*

Dear Sir/ Madam,

RE: JACKLINE M SELVESTA - REGISTRATION NO. MHSM/2018/22407

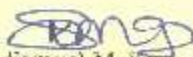
The purpose of this letter is to introduce the above named student who is pursuing Master of Public Health in the Department of Epidemiology & Biostatistics in the School of Public Health.

The title of her research is *"Assessment of Health Workforce Preparedness for the Implementation of Universal Health Care Coverage in Nakuru West Sub-County, Kenya."*

She has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data for her research between July and September, 2019.

Any assistance accorded to her will be highly appreciated.

Thank you.


Mount Kenya University
Dean, School of Postgraduate Studies
P. O. Box 342 - 01000 Thika
Dr. Samuel M. Karanga, Ph.D
Dean, School of Postgraduate Studies
Enc.

Appendix VII: University Ethical Clearance



REF: MKU/ERC/1370
TO: JACKLINE M SELVESTA

REG: MHSM/2018/22407

Date: 6 June, 2019

Dear Sir/Madam,

RE: ASSESSMENT OF HEALTH WORKFORCE PREPAREDNESS FOR THE IMPLEMENTATION OF UNIVERSAL HEALTH CARE COVERAGE IN NAKURU WEST SUB COUNTY, KENYA

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **774**. The approval period is **30/05/2019 – 29/05/2020**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by **Mount Kenya University**.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification.
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours.
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) (<https://oris.nacosti.go.ke>) and also obtain other clearances needed.

Yours sincerely,

The Chairman
Mount Kenya University
Ethics Review Committee
P. O. Box 342 - 0100, Thika

Prof. Francis W. Muregi
Chairman, Mount Kenya University IERC

Appendix VIII: Study Authorization



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254 20 2215471,
2241349, 3310571, 2219420
Fax: +254 20 318245, 318249
Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote:

NACOSTI Upper Kabete
Off Waiyaki Way
P.O. Box 30625-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/19/03431/31756**

Date **25th July, 2019**

Jackline Mokeira Selvesta
Mount Kenya University
P.O. Box 342-01000
THIKA.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Assessment of health workforce preparedness for the implementation of universal health care coverage in Nakuru West Sub County, Kenya.*" I am pleased to inform you that you have been authorized to undertake research in **Nakuru County** for the period ending **25th July, 2020.**

You are advised to report to **the County Commissioner, the County Director of Health Services, and the County Director of Education, Nakuru County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.


GODFREY P. KALERWA., MSc, MBA, MKTM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nakuru County.

The County Director of Education
Nakuru County.

Appendix IX: Studylicence

THIS IS TO CERTIFY THAT:
MISS. JACKLINE MOKEIRA SELVESTA
OF MOUNT KENYA UNIVERSITY, 0-20100
NAKURU, has been permitted to conduct
research in Nakuru County

on the topic: ASSESSMENT OF HEALTH
WORKFORCE PREPAREDNESS FOR THE
IMPLEMENTATION OF UNIVERSAL
HEALTH CARE COVERAGE IN NAKURU
WEST SUB COUNTY, KENYA.

for the period ending:
25th July, 2020

Permit No : NACOSTI/P/19/03431/31756
Date Of Issue : 25th July, 2019
Fee Received :Ksh 1000



.....
Applicant's
Signature

.....
Director General
National Commission for Science,
Technology & Innovation

THE SCIENCE, TECHNOLOGY AND
INNOVATION ACT, 2013

Grant of Research Licenses is guided by the Science,
 Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

The License is valid for the proposed research, location and
 defined period.

The License and any rights thereunder are non-transferable.

The Licensee shall inform the County Government before
 commencement of the research.

Excavation, filming and collection of specimens are subject to
 further necessary clearance from relevant Government Agencies.


The Licensee does not give authority to transfer research materials.

NACOSTI may monitor and evaluate the licensed research project.


The Licensee shall submit one hard copy and upload a soft copy
 of their final report within one year of completion of the research.

NACOSTI reserves the right to modify the conditions of the
 license including revocation without prior notice.

National Commission for Science, Technology and Innovation
 P.O. Box 30623 - 00100, Nairobi, Kenya
 TEL: 020 410 7000, 0713 788787, 0735 444245
 Email: dg@nacosti.go.ke, registry@nacosti.go.ke



REPUBLIC OF KENYA



National Commission for Science,
Technology and Innovation

RESEARCH LICENSE

Serial No.A 26118

CONDITIONS: see back page

Appendix X: Authorization From Chief Officer, Health Services Nakuru County



**DEPARTMENT OF HEALTH SERVICES
NAKURU COUNTY**



Email: copublichealth.nakuru@gmail.com

CHIEF OFFICER, PUBLIC HEALTH
NAKURU COUNTY
P.O BOX 2870-20100
NAKURU
3rd September, 2019

REF: CGN/CPH/HR/VOL.1/5/2019/132

TO
MISS JACKLINE MOKEIRA SELVESTA
MOUNT KENYA UNIVERSITY
NAKURU

RE: RESEARCH PERMISSION

This letter serves as an authorization from the Department of Health Services Nakuru to allow the researcher to conduct research on "Assessment of health workforce preparedness for the implementation of universal health care coverage in Nakuru West Sub County, Kenya."

The Department has no objection to the said research.

Thank you,

**SAMUEL KING'ORI
CHIEF OFFICER, HEALTH SERVICES
NAKURU**

C.C.
- All facility In-charges, Nakuru County

Appendix XI: Permission From Department of Health Services, Nakuru West Sub-County



**DEPARTMENT OF HEALTH SERVICES
NAKURU COUNTY**



Email: mohnakuru@yahoo.com
When replying please quote

Sub County Medical Officer of Health
Nakuru East and West
P.O BOX 1214
NAKURU

REF: B.31/VOL.III/34

4th September 2019

TO WHOM IT MAY CONCERN

RE: JACKLINE MOKEIRA SELVESTA REG. NO. MHSM/2018/22407 MASTER OF HEALTH SYSTEM MANAGEMENT STUDENT AT MOUNT KENYA UNIVERSITY

The above named has been authorized to conduct research on "Assessment of health workforce preparedness for the implementation of universal health care coverage in Nakuru West Sub County, Kenya" in Level I, II, III Health facilities in Nakuru West Sub County.

We kindly request your assistance.



**THOMAS KIPROTICH CHEPCHIENG
SUB COUNTY TEAM LEAD
NAKURU WEST SUB COUNTY
NAKURU COUNTY**

Appendix XII: Permission From The Ministry Of Interior Andco-Ordination Of National Government



**THE PRESIDENCY
MINISTRY OF INTERIOR AND
CO-ORDINATION OF NATIONAL GOVERNMENT**

Telegram: "DISTRICTOR" Nakuru
Telephone: Nakuru 051-2212515
When replying please quote

COUNTY COMMISSIONER
NAKURU COUNTY
P.O. BOX 81
NAKURU

Ref No. CC. SR.EDU 12/1/2/VOL.V/30

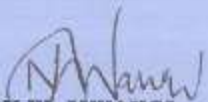
3rd September, 2019

Deputy County Commissioner
NAKURU WEST

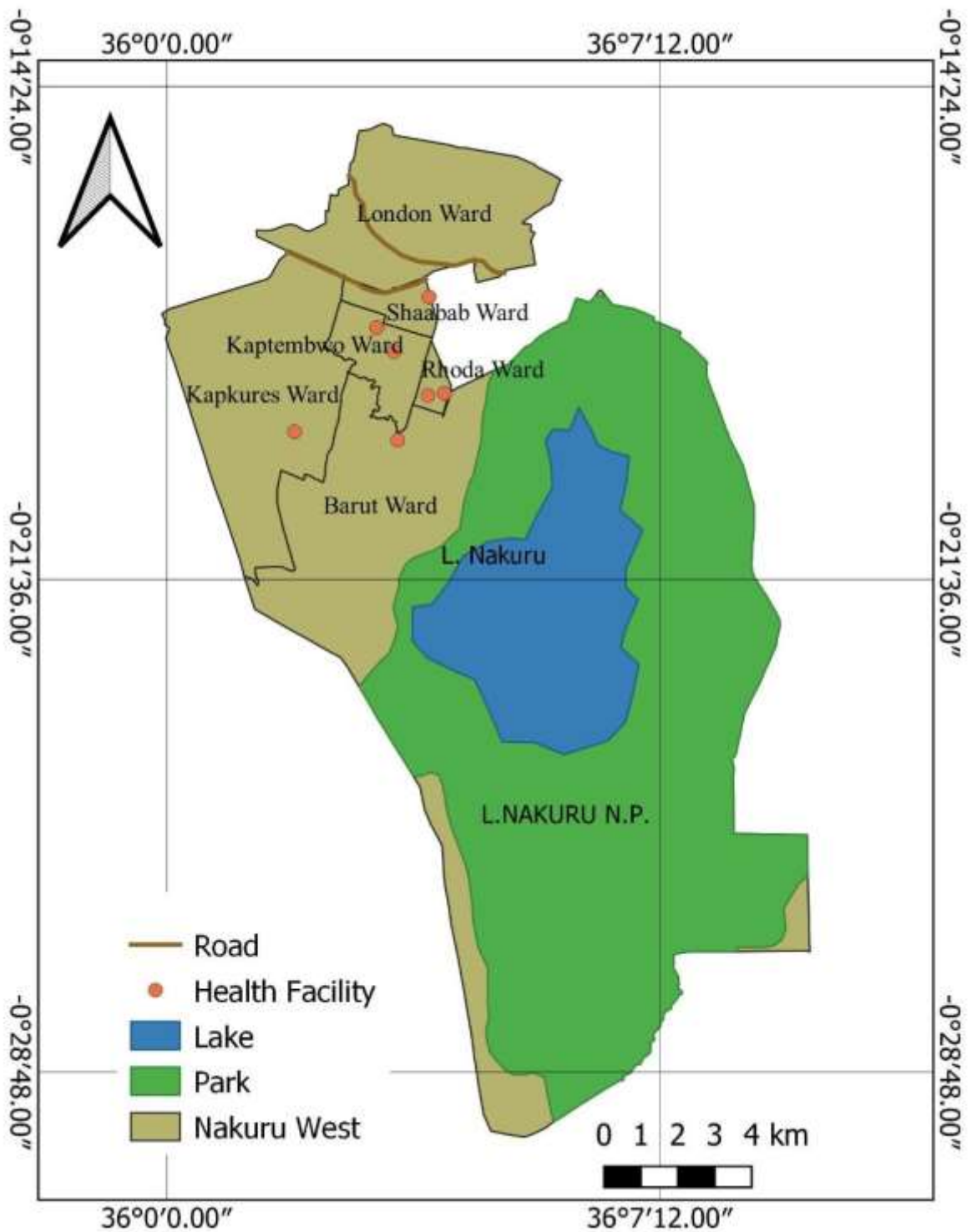
RE: - RESEARCH AUTHORIZATION - JACKLINE MOKEIRA SELVESTA

The above named from Mount Kenya University has been authorized to carry out research on "**assessment of health workforce preparedness for the implementation of universal health care coverage**" in Nakuru West Sub County for a period ending 25th July 2020.

Please accord her all the necessary support to facilitate the success of her research.


**MARY W. MWANGI
FOR: COUNTY COMMISSIONER
NAKURU COUNTY**

Appendix XIII: Study Area



Appendix XIV: Similarity Index

newly revisited

ORIGINALITY REPORT

20%

SIMILARITY INDEX

16%

INTERNET SOURCES

5%

PUBLICATIONS

17%

STUDENT PAPERS

MATCH ALL SOURCES (ONLY SELECTED SOURCE PRINTED)

8%

★ Submitted to Kenyatta University

Student Paper

Exclude quotes Off

Exclude bibliography Off

Exclude matches Off