FACTORS INFLUENCING ACCESS TO HEALTH CARE AMONG ELDERLY PERSONS IN INFORMAL SETTLEMENTS IN NAKURU TOWN, KENYA

JACKQUELINE KIPTUI

MDS/NKR/8328/19

This dissertation is submitted to the Faculty of Social Sciences in partial fulfilment of the requirements for the award of a Master's Degree in Development Studies from St. Paul's University.

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Supervisors:

Dr. Peter Mwaura

Dr. David Gichuhi

September 2021

DECLARATION

This dissertation is my original work and has not been presented for the award of degree in any other university. I agree that this dissertation may be available for reference and photocopying, at the discretion of the university.

JACKQUELINE KIPTUI

MDS/NKR/ 8328/2019

Signature…  Date…16/09/2021

We confirm that the work reported in this project has been done by the student under our supervision.

Dr. Peter Mwaura

Laikipia University

Signature…  Date…16/09/2021

Dr. David Gichuhi

Karatina University

Signature…  Date… 16/09/2021

DEDICATION

This work is dedicated to my parents and siblings for their material and moral support during its undertaking. May God bless you all.

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First, I wish to thank God for good health and sound mind all through my studies. He provided me with all resources necessary to undertake my studies and for this I will always remain grateful.

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TABLE OF CONTENTS

DECLARATION ii

DEDICATION iv

ACKNOWLEDGEMENT v

LIST OF TABLES viii

LIST OF FIGURES ix

ABBREVIATIONS AND ACRONYMS x

ABSTRACT xi

CHAPTER ONE INTRODUCTION 1

1.1 Overview 1

1.2 Background of the Study 1

1.3 Statement of the Problem 5

1.4 Objectives of the Study 5

1.4.1 General Objectives 5

1.4.2 Specific Objectives 6

1.5 Research Questions 6

1.6 Significance of the Study 6

1.7 Scope of the Study 7

1.8 Limitations of the Study 7

1.9 Assumptions of the Study 7

1.10 Definition of Key Terms 8

1.11 Chapter Summary 8

CHAPTER TWO LITERATURE REVIEW 9

2.1 Introduction 9

2.2 Theoretical Review 9

2.2.1 Disengagement Theory 9

2.2.2 Social Dependency 10
2.2.3 Health Belief Model 11
2.3 Empirical Review 12
2.3.1 Family Support and Access to Health Care 12
2.3.2 Cultural Beliefs and Access to Health Care 14
2.3.3 Social Protection and Access to Health Care 16
2.3.4 Transportation System and Access to Health Care 18
2.4 Conceptual Framework 19
2.5 Summary and Gaps 20
CHAPTER THREE RESEARCH METHODOLOGY 22
3.1 Introduction 22
3.2 Research Design 22
3.3 The Study Site 22
3.4 Target Population 22
3.5 Sampling 23
3.6 Data Collection Tools/ Instrument 24
3.7 Pilot Study/ Pre-testing 24
3.8 Methods of Data Analysis 25
3.9 Ethical Considerations 25
CHAPTER FOUR DATA ANALYSIS, PRESENTATION, AND INTERPRETATION 26
4.1 Introduction 26
4.2 Response Rate 26
4.3 Demographic Factors 26
4.3.1 Age 26
4.3.3 Marital Status 28
4.3.5 Occupation of the Respondents 29
4.3.6 Living Children 30

4.4 Access to Health Care among Elderly Persons 30
4.4.1 Distance from Nearest Health Facility 30
4.4.2 Inability to access Health Care in the Last 3 Months due to Transport 30
4.4.3 Access to Special Services for Elderly People 31
4.4.4 Inability to access Health Care due to Financial Problems 32
4.4.5 Respondents Rating of Service Waiting Time 32
4.4.6 Distribution of Respondents based on Access to Health Care 33
4.4 Family Support and Access to Health Care 33
4.4.1 Household Companion and Access to Health Care 34
4.4.2 Family Assistance and Access to Health Care 35
4.4.3 Relation with Family Members 37
4.5 Cultural Beliefs and Access to Health Care 39
4.5.1 Religion and Access to Health Care 39
4.5.2 Traditional Medicine and Access to Health Care 41
4.5.3 Cultural Taboos and Access to Health Care 43
4.6 Social Protection and Access to Health Care 44
4.6.1 Cash Transfers and Access to Health Care 45
4.6.2 Government Intervention and Access to Health Care 47
4.6.3 Retirement Schemes and Access to Health Care 49
4.7 Transportation System and Access to Health Care 51
4.7.1 Cost of Transport and Access to Health Care 51
4.7.2 Transportation Programme and Access to Health Care 53
4.7.3 Means of Transport and Access to Health Care 55
4.8 Chapter Summary 57
CHAPTER FIVE SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 58
5.1 Introduction 58
5.2. Summary of the Findings 58

5.2.1 Family Support and Access to Health Care 58
5.2.2 Cultural Beliefs and Access to Health Care 58
5.2.3 Social Protection and Access to Health Care 59
5.2.4 Transportation System and Access to Health Care 59
5.3 Conclusions 59
5.4 Recommendations of the Study 60
5.5 Recommendation for Further Studies 62
REFERENCE 63
APPENDICES 68
Appendix I: Letter of Introduction 69
Appendix II: Consent Form 70
Appendix III: Survey Questionnaire 71

LIST OF TABLES

Table 3.1: Sampling Frame 23
Table 4.1: Age of Respondents 27
Table 4.2: Respondents Highest Education Level 29
Table 4.3: Respondents Occupation 29
Table 4.4: Distance from Nearest Health Facility 30
Table 4.5: Distribution of Respondents based on Inability to Access Health care 31
Table 4.6: Distribution of Respondents based on Access to Special Services 31
Table 4.7: Unable to Access Health Care due to Financial Problems 32
Table 4.8: Respondents views on Waiting Time 32
Table 4.9: Respondents distribution on access to health care 33
Table 4.10: Cross-Tabulation of Household Companion and Access to Health Care 35
Table 4.11: Cross-Tabulation of Receiving Assistance and Access to Health Care 37
Table 4.12: Relationship with family members 38
Table 4.13: Cross-Tabulation of Relation with Family and Access to Health Care 38
Table 4.14: Cross-Tabulation of Religion and Access to Health Care 40
Table 4.15: Cross-Tabulation between Traditional Medicine and Access to Health Care 42
Table 4.16: Cross-Tabulation of Health Taboos and Access to Health Care 44
Table 4.17: Respondents' Satisfaction with the Cash Transfer Programmes 45
Table 4.18: Cross-Tabulation of Cash Transfer and Access to Health Care 46
Table 4.19: Cross-Tabulation of Government Intervention and Access to Health Care 48
Table 4.20: Cross Tabulation of Retirement Scheme and Access to Health Care 50
Table 4.21: Cross-Tabulation of Cost of Transport and Access to Health Care 52
Table 4.22: Cross-Tabulation of Transportation Programme and Access to Health Care 54
Table 4.23: Distribution of Respondents by Means of Transport 55
Table 4.24: Cross-Tabulation of Means of Transport and Access to Health Care 56

LIST OF FIGURES

Figure 2.1: Conceptual Framework 20
Figure 4.1: Gender of Respondents 27
Figure 4.2: Respondents Marital Status 28
Figure 4.3: Household Companion…….....38
Figure 4.4: Assistance from Children 36
Figure 4.5: Respondents Distribution by Religion……..……43
Figure 4.6: Respondents Beliefs on Traditional Medicine 41
Figure 4.7: Cultural Taboos Concerning Health Care 43
Figure 4.8: Times that the Respondents has benefited from Government Interventions…....51
Figure 4.9: Distribution of Respondents by Membership of Retirement Scheme……...53
Figure 4.10: Cost of Transport to Preferred Health Care Facility 51
Figure 4.11: Transportation Programmes that assist the Elderly's 53

ABBREVIATIONS AND ACRONYMS

CHW	Community Health Worker
COVID–19	Corona Virus
HISP	Health Insurance Subsidy Programme
KIIs	Key Informant Interviews
KNBS	Kenya National Bureau of Statistics
KNPS	Kenya National Population Census
KPHC	Kenya Population and Housing Census
MTP	Medium Term Plan
NACOSTI	National Commission for Science and Technology
NHIF	National Hospital Insurance Fund
OPCT	Older Persons Cash Transfer
PGH	Provincial General Hospital
PPAC	Patient Protection and Affordable Care
SDGs	Sustainable Development Goals
UHC	Universal Health Coverage
USP	United State Population

ABSTRACT

Growing old is appealing to people from various cultures around the world. This is because many people can learn through the experience of the elderly when solving different rising issues in the society. In Kenya, health care discussion has emerged to set the pace on how to care for the elderly population. However, this can be a challenge to the old population and also there is lack of support from their family as well as the community. The general objective of the study is to investigate factors that influence access to health care among elderly persons in informal settlements in Nakuru Town, Kenya. The specific objectives of the study were to: examine the influence of family support; establish the influence of cultural beliefs; analyse the influence of social protection; and assess the influence of transportation system on access to health care among elderly persons in informal settlements Nakuru Town, Kenya. The study was based on the Disengagement theory, Social Dependency Theory, and Health Belief Model (HBM). A descriptive research design was used to target both the elderly men and women of 70 years and above, within the informal settlements in Nakuru Town, Kenya. Cluster sampling and simple random sampling techniques were used to select 399 respondents from a target population of 248,785 elderly persons. The research instrument was a semi-structured survey questionnaire. A pilot study was conducted in Kibera in Nairobi city to assess validity and reliability of the instrument. Data analysis involved the use of descriptive statistics such as frequencies and percentages, as well as, inferential statistics mainly cross-tabulation with chi-square. The analysis was aided by Statistical Package for Social Sciences (SPSS) version 27 software. Results are graphically and thematically presented. Results showed that the majority of the respondents (70.3%) had low access to health care services. Equally, access to health care services is influenced by family factors particularly material and emotional support from family members. It is also influenced by cultural issues including beliefs on traditional medicine and taboos, as well as, social protection programmes specifically cash transfers, government interventions in health care, and retirement benefits. In addition, access to health care is influenced by transportation factors including cost of transport, access to transportation programmes, and means of transport used to reach health care facilities. Based on these findings, the study recommends that policy makers should create awareness regarding the need for families to support the elderly kin and the ongoing government interventions such as health insurance subsidy programme (HISP), conscientising the general public on the importance of the enrolment on retirement benefit schemes and equally saving for their own support in old age.

CHAPTER ONE
INTRODUCTION

1.1 Overview

The chapter presents the background of the study, problem statement, objectives, and research questions. Furthermore, includes the significance, scope, limitations, and assumptions of the study. In addition, the definition of key terms and chapter summary.

1.2 Background of the Study

The world's aging population is growing at a rapid pace; for instance, in 2019, the global population of those aged 70 and up increased by 703 million. More importantly, the Eastern and South-Eastern Asia's population of people aged 70 and above is expected to double, from 6% in 1990 to 11% in 2019, and Latin America and the Caribbean's population of people aged 70 and up is expected to double, from 5% in 1990 to 9% in 2019. Also that between 2019 and 2050, the world's population is expected to double in regions such as Northern Africa and Western Asia, Central and Southern Asia, Latin America and the Caribbean, as well as Eastern and South-Eastern Asia - where the proportion of the population aged 70 and up is predicted to more than quadruple (Appleby, 2013). Interestingly, around the world, the survival rate of elderly people over the age of 70 is improving. This is due to the fact that between the years 2015 and 2020, an elderly person (70 years) might live for an additional 17 years on average, and between 2045 and 2050, the figure will have grown to 19 years, and between 2015 and 2020, the elderly person's life expectancy rate is expected to rise in all countries. Most important, women have recently lived for 4.8 years longer than men, but globally the gap in gender is expected to decrease over the next three decades (Tabish, 2012).

These figures have adverse implication on any given country for instance; they can lead to a variety of health issues, which raises the study's interest. As a result of the rising demand for geriatric health services, adequate preparation is required. Important to note is the fact that individuals or people in society who are 70 years or older are considered as elderly, whereas access to health care refer to the elderly's ability to receive medical treatment (Ogura & Jakovljevic, 2018). Due to their bodies' inadequate immune systems' ability to fight against diseases mainly associated with old age can emerge and some of these that are incurable (Wariuko et al., 2017). Disengagement theory, Social dependence theory, and the Health Belief Model are all relevant theoretical foundations. Disengagement theory explains how elderly people behave in society in terms of their roles or withdrawal, whereas Social

dependency theory is concerned with the help or assistance provided to elderly people in terms of tasks or roles, and Health belief theory is concerned with how people behave in terms of their health and how that affects their access to health care.

The United States is one of Nations with large population over the years for both the old age people and the youths (Garza, 2016). The population rate of 70 years and above is approximate 13.3%, while 42% for the general population who are identified as African American, Hispanic, Asian, American Indian, and Alaskan. This is an indication that it is not only the aged who are increasing in number but also the vulnerable such as orphans and less fortunate in the society who cannot afford a meal a day. United States population have various races either white or mixer from more than two races of black and white (Scott, 2016). This difference in race can influence the youth's especially in developed countries in their access to health care that is under the law and the main reason is lack of health insurance cover that is either employer-sponsored or public. Others are the income which correlated highly with lack of insurance in younger populations (Hagan et al., 2016). Also in China the elderly population has increased to an extent that this might led to increase in demands for health services, and suffering from chronic diseases due to high levels of poverty (Zhou et al., 2020). This is caused by industrial activities performed in China causing rising obesity rates, high smoking prevalence, and high levels of pollution that has led to serious concerns about the health of the elderly population in the coming decades, and poverty due to health problems being the major causes of those in the countryside in China. Hence proper understanding of factors affecting health services especially the elderly in China due to development factors increase the need for intervention. This could be exercised mainly on pollution of the environment so as to deal with health care issues since prevention is better than cure (Gong, 2016).

In Africa participation and involvement of people are a crucial element in healthcare reform. However, engagement of the elderly has been given limited attention, due to daily increase change in population as well as those who use the health care systems. Participation on issues of health care is useful especially from individuals and caregivers in preventing various diseases. This is also important as there are more elderly persons suffering from chronic diseases and engaged on self-management and equally are the major users of the system. Yet, enhancing a more active role through participation in the health care sector can improve the quality of lives of patients, ensure effective and efficient and health results in society, as well as improve both care and outcomes for the population of elderly persons. Equally, educate the

caregivers on the need for engagement as active partners. This is important as they are required to make decisions in the health care (Elliott et al., 2016).

According to the 2019 census, Kenya has 1.2 million people over 65 years old in a population of 38.6 million, accounting for around 68 percent of the elderly (Maina, 2017). However, she lacks a legislative strategy for assisting the old, despite the fact that a draft policy was developed in 2009, this has not been acted upon. The country currently seems to rely on the Constitution to protect the rights of the individuals. For instance, Article 57 specifies the rights for the elderly. Equally, Kenya currently lacks a public insurance plan for the elderly, as well as inadequate health insurance. This is due to the fact that the elderly are supposed to get health-care help from public hospitals without special provisions or arrangements. More importantly, the care for vulnerable populations is usually handled mainly by religious institutions, Faith Based Organisations and Community Based Organisations, family members and/or interested individual, civil societies and non-governmental organisations. As a result, long-term and short-term care for the elderly is in high demand in Kenya.

Kenya National Bureau of Statistics (KNBS) in 2019 in Nakuru County was 2.1 million with 616,046 households, as well as in Kenya Population and Housing Census (KPHC) (Statistics, 2019). The Town is estimate 1,850 m above sea level. It is 4th largest urban centre in Kenya having a population of 570,674. The population rate, according to the study, indicates that 30% of people aged 70 years and above require the care from geriatrician, and they also take care of 700 patients. Geriatric medicine in this case is mainly concern with diagnosis, treatment, as well as prevention of disease in old age people, and the issues that specifically affect the elderly in Kenya (Maina, 2017). Population and use of geriatric medicine helps in achievement of Universal Health Coverage (UHC) which means a lot than health care only, by ensuring all Kenyans can get quality health services in any place as required, without suffering financial hardship.

However, the sustainable development goals (SDGs), the big four Agendas for development, and Kenya vision 2030 are in sync regarding access to health care through Universal Health Coverage for the elderly people that is significant to the study. The Kenya Vision 2030 aims at making Kenya more of a development nation in enhancing targets for all aspects in social welfare projects, and programs which improve the quality life among its citizens. In addition, the aim is to transform Kenya into a new change in industries, stable income country with a conducive and safe environment. Moreover, the vision is put into action through successive five-year medium-term plans (MTP IV) in 2018-2022 that succeed the second year medium-

term plans (MTP II) 2013-2017. Kenya's vision 2030 includes economic, social, and political pillars (Onyango, 2019). Economic pillars enhance maintenance of 10% sustainable economic growth per annum over the next 25 years in Kenya, while a social pillar is about fairness and unity in the society through equal distribution of resource, and conducive environment. The political pillar is concerned with people's behaviours, as well as their results-focused and accountable democratic political environment in the society (Kenya Government, 2017). The pillars enhance basic transformation of eight key social sectors, namely; Education & Training, Health, Water & Sanitation, Environment, Housing & Urbanisation, and Gender, Youth, Sports & Culture, and also make special provisions for various people with disabilities as well as the marginalised communities (Kenya Government, 2013).

The big four agendas for development in Kenya include; food security, affordable housing, manufacturing, and affordable health care for all or Universal Health Coverage (UHC) (Kenya Government, 2012). Affordable health care is essential in this study due to access to health care among elderly people in Nakuru Town informal settlements, because health care services spending will go from Sh61 billion in 2018 to Sh73 billion in 2021. In reference to Kenya, this will go from the current 36 percent coverage to achieve 100 percent universal health coverage by 2022 when the population will be about 50 million (Bankelele, 2018). It is evident that the rural communities in Kenya, and slum areas in the towns, face challenges especially in accessing health care services. It is key to find out who has ready access to the facilities as well as services offered and what factors hinder those who do not access the welfare services in the society.

More importantly, an increase in elderly persons in ten-year will create more cause of illness among the older persons because the immune system is decreasing as well as their years in age. It is not unusual to note the perception among the population which associates aging with increase in illness. As a result, this affects the access of patients to health care services in the community and this is not exclusive of this population that are served by Provincial General Hospital (PGH) in Nakuru where intervention should be improved for the better (Gudda et al., 2019). Thus, the proposed study seeks to investigate factors influencing access to health care among elderly persons in the informal settlements, Nakuru Town, Kenya.

1.3 Statement of the Problem

Access to health-care services is critical for Kenyans as is the case in other countries in Africa. A health-care debate has erupted to set the tone on how to care for Kenya's older population, which is at risk of becoming ill as is the case in other parts of Africa and the world. However, the legislative draft policy for addressing senior issues that was established in 2009 has yet to be adopted. Kenya's 2030 vision, the Big Four Agendas, and the Sustainable Development Goals face a number of challenges especially in regards to implementation. The other issue is the breakout of the Corona Virus (COVID–19) pandemic which has affected the health care especially the vulnerable among them the elderly persons. This is mainly due to medical conditions and low body immune system they may undergo that can lead to a higher risk of suffering from the pandemic (Agade, 2020).

In addition, due to inaccessibility to support the elderly persons by offering quality health care especially in Nakuru County, for instance, by allocating cash transfers and universal pension for the elderly this can create challenges. While the living conditions of some people in slums such as Kivumbini, Kaptembwa, Rhoda, Lake View, Flamingo, Kaloleni, and Bondeni are extremely poor or live in very low living standards, for example, some of the residents of Kivumbini, Kaptembwa, Rhoda, Lake View, Flamingo, Kaloleni, and Bondeni lack accessibility to basic needs, such as health care, lack of finance, absence of family support, physical inaccessibility of health service providers, neglect, poor sanitation, and other constraints (Kenya Government, 2012).

Despite government initiatives to increase health care access for the elderly population, it remains unclear whether such initiatives are effective. Such initiatives are expected to reduce incidents of death and diseases among the elderly which is not easy for the initiatives to achieve access to health care among elderly persons in the country. Hence, this study seeks to investigate the factors that influence access to health care among elderly persons in the informal settlements in Nakuru Town, Kenya.

1.4 Objectives of the Study

The objectives in the study include:

1.4.1 General Objectives

The general objective of the study is to investigate factors influencing access to health care among elderly persons in the informal settlements in Nakuru Town, Kenya.

1.4.2 Specific Objectives

The specific objectives of this study are to:

i. Examine the influence of family support on access to health care among elderly persons in the informal settlements in Nakuru Town, Kenya.
ii. Establish the influence of cultural beliefs on access to health care among elderly persons in the informal settlements in Nakuru Town, Kenya.
iii. Analyse the influence of social protection on access to health care among elderly persons in the informal settlements in Nakuru Town, Kenya.
iv. Assess the influence of transportation system on access to health care among elderly persons in the informal settlements Nakuru Town, Kenya.

1.5 Research Questions

i. What is the influence of family support on access to health care among elderly persons in the informal settlements Nakuru Town, Kenya?
ii. How do cultural beliefs influence access to health care among elderly persons in the informal settlements Nakuru Town, Kenya?
iii. Does social protection influence access to health care among elderly persons in the informal settlements Nakuru Town, Kenya?
iv. What is the influence of transportation system on access to health care among elderly persons in the informal settlements Nakuru Town, Kenya?

1.6 Significance of the Study

Growing old is attractive to people from different cultures across the world, due to learnt experience from the elderly to solve various issues emerging in the society. This is no different from the case of this study which aims at investigating the factors influencing access to health care among elderly persons in the informal settlements in Kenya. Health care services among the elderly in any country should not be ignored. The expectation of ageing population rate will increase daily causing both a sense of celebration as well as a reason to worry. The information on access to health care services can be used to improve on the lives of elderly persons in Kenya who are living especially in the informal settlements due to the poor living standard they face. Equally, the other important factors that affect this elderly population in the informal settlements include allocation of cash transfer, retirement schemes and other programmes such as working on universal health coverage, which is much more

than ensuring quality health services by all Kenyans wherever they are. Also it ensures that they get the services they need without any kind of financial constraints. This study aims at assisting the government and other stakeholders devise novel techniques to deal with health-care access. Equally, the findings of this study will not only add to knowledge in such related areas on health-care for the elderly people especially in developing nations.

1.7 Scope of the Study

The study aims at investigating the factors influencing access to health care among elderly persons in the informal settlements in Kenya. According to the Kenya National Bureau of Statistics (2019), Nakuru County was 2.1 million with 616,046 households, as well as in Kenya Population and Housing Census (KPHC) (Statistics, 2019). Nakuru Town lies approximately 1,850 m above sea level. It is the 4th largest urban centre in Kenya having a population of 570,674. The population rate according to the study indicates that 30% of people age 70 years and above require the care from geriatrician, who also care for 700 patients. Geriatric medicine concerns diagnosis, treatment, as well as prevention of disease in old age people which is focus of this study, specifically the elderly persons in Kenya encounter (Maina, 2017) and more specifically in Nakuru County.

1.8 Limitations of the Study

The data collection in the study was subjected to the elderly persons who might have their own opinions on the factors influencing access to health care in the informal settlements in Kenya. Illiteracy and language barrier were a concern, as respondents were unable to read or write, causing several queries to be misinterpreted. In such cases, the researcher trained community members to translate the questions for the respondents and then fill in the blanks when they responded. The scope of the study was limited due to insecurity and poor access to the study area, affecting the mobility and safety of the researcher as well as accessibility of the researcher to respondents.

1.9 Assumptions of the Study

The study had assumption that factors such as family support, cultural beliefs, social protection, and transportation system influence the access to health care among elderly persons in the informal settlements in Nakuru Town Kenya.

1.10 Definition of Key Terms

Access to health care: The ability of the age to get required medical care services from the hospital facilities when in need of it.

Cultural beliefs: These are the perceptions of the people in the community or society concerning the access to health care of elderly persons. It can be through religion, traditional medicine, and taboos of different people in various cultural settings.

Family support: It is assistance provided to elderly persons in access to health care in order to create good relationship among the relatives.

Social protection: This consists of programmes or schemes that help in health services such as cash transfer, government interventions and retirement schemes.

Transportation system: They are basically mobility of movement for the elderly person in terms of costs, coverage, and mode.

1.11 Chapter Summary

Chapter one sets the framework for the study by discussing the background of the study variables and problem statement, objectives and research questions. It also includes a statement on the significance of the study, scope, and limitations and assumptions. The chapter concludes with the key definition of terms as utilised in the study.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter examines a literature review related to the subject of this study; the factors influencing access to health care among elderly persons in the informal settlements. The review is divided into various sections: theoretical review, empirical review, and conceptual framework of the variables which will be discussed as well as summary and gaps of the study.

2.2 Theoretical Review

This section consists of the three theories which applied in the study. The theories was relevant to the study that is Disengagement theory focusing mainly on social interaction and the roles of the elderly persons in the society, while Social Dependency Theory simply focus on help and assistance that elderly need due to their old age, and Health Belief Model (HBM) concern with health behaviour of people on the reasons why people wait until the last minute to go for check-ups for early diagnosis.

2.2.1 Disengagement Theory

This theory was founded by Elaine Cumming and William Earle Henry. It was among the first theories in Social Science that sought to explain the experience of the elderly persons. It mainly focuses on the social interaction and roles of the old in the society (Crossman, 2019). Disengagement theory presents an interaction system of the old population and the evolution in their social lives, inspired by functionalist theory. Cummings and Henry advanced two key ideas in theory; social interaction and withdrawal.

Social interaction refers to the process of engaging with the people living within our neighbourhoods and communities (Asiamah, 2017). It entails establishing relationships with other people, spending time with others, and engaging in mutual actions. Proponents of disengagement theory opine that the level of social interaction decreases as people advance in age due to various factors such as diminished mobility, reduced ability to maintain social relations, and being subjected to ridicule or mockery (Wanka, 2018). Decline in social interaction ushers in the withdrawal process. Withdraw is the act of gradually pulling out from public spaces and communal activities.

Furthermore, the propounders of this theory contend that it is natural for the older person to withdraw from individual and society, while also becomes less reinforced to conform to social norms. Equally opine that the withdrawal process is different across individuals and is determined by a myriad of factors. A major factor is the neighbourhood or communities in which the elderly live. Withdrawal is likely to be slow and less pronounced among adults living in communities that have structures that support the elderly such as transportation services that cater to the need of the elderly. Withdrawal is also likely to be slower in communities where elderly persons are respected and protected from discrimination and ridicule (Saha & Ashikuzzaman, 2021). This factor had a major implication on the current study given that the study focused on the elderly population residing in the informal settlement in Nakuru. The theory advances the fact that the conditions within these informal settlements are likely to determine the level of withdrawal among the elderly.

Withdrawal make the elderly unhappy unless they acquire another role compatible with the disengage state. It also has a negative influence on the elderly persons access to health care and other services in the society because the elderly can be easily forgotten by societal or organisational structures (Iraki, 2019). However, some critics of this theory point out that the theory was not perfect for Social Science since it ignores the natural, innate, and inevitable process, as well as that it is universally applied. More importantly, the theory brings an important conflict within Sociology, with functionalist and other theoretical views because the theory apparently fully ignores the role of a class of the old in shaping their experience (Saha & Ashikuzzaman, 2021). Other researchers argue that this theory fails to capture the complex and rich on the social lives of the elderly, as well as other forms of involvement following retirement.

2.2.2 Social Dependency

The Social Dependency theory was developed in the late 1950s, with the help of Raul Prebisch, Director of the UN Economic Commission for Latin America. This theory states that patients require help or assistance from others in order to complete activities, responsibilities, or roles. As a result of their age, the elderly are said to be reliant on others in society. The Social Dependency theory is defined by three abilities that have been identified as helpful in portraying an adult role and these are self-care, mobility, and social competence (Benoliel et al., 1980). In terms of operation, social reliance was characterised as the acquisition behaviour of an individual's three capacity scores. The revised instrument was tested on advanced diseases to determine its reliability.

The theory is relevantly related to the study in that; old age is seen as a social problem in society. The government and media often portray the elderly as vulnerable groups as their population daily increase, which can create a burden on welfare services. The aged continue to be viewed as a problem since people today live for longer time than ever before and in better health for a long period. An example of this view is that society faces long term care, pension problem and epidemic diseases among others. Thus, the attitude towards the elderly can be reflected by both the way it is socially constructed as a period of social dependency (Yuill, Crinson, & Duncan, 2010).

The critics of the Social Dependency theory state that the school of learning does not provide any major empirical evidence to support its arguments. Also some examples provided in the theory do not align with the theory, such as in newly emerged industrial countries of South East Asia (Shah, 2013). Another criticism is that the schools that depend on others consider collaborating with multinational corporations as detrimental for more support which is important means of transfer of technology. Another criticism is theory base arguments on received notions such as the nation-state, capitalism, and industrialization, and finally the criticism of not reflecting the change in socio-economic as well as political situations of the contemporary world.

2.2.3 Health Belief Model

Health Belief Model (HBM) is a model in research concerning the health behaviour of individuals, and it was formed in the early 1950s by Social Scientists such as Hochbaum, Rosenstock and others at United States Public Health Service. This was in order to understand the reasons why people wait until the last minute to go for check-ups for early diagnosis for instance through screening test (Hochbaum & Rosenstock, 1950). This model relate to elderly person in that as years decline the behaviour also changes. For instance, there could be failure to adopt proper plans on preventing or evaluating the tests for detection of the disease an old age person may have in good time. The model highlights on the behaviour in health due to some belief pattern of people especially old age. It also argues that individual views, modifying circumstances, and the state of action can all be used to motivate someone to engage in healthy behaviour. In addition, individual perceptions refers to how an individual or elderly person views things that are important to their health, such as perceived susceptibility and severity, while modifying factors include demographic variables, perceived threat, and cues to action, and the likelihood of action is defined as the perceived benefits minus the perceived barriers to taking the recommended action. Merging of all these factors

causes response in behaviour which manifests itself due to the possibilities happening. Health Furthermore, the Belief Model emanates from psychological and behavioural theory with basic knowledge of the two components concerning relationship in health and behaviour such as either desiring to avoid illness, or contrarily being well if already sick, and the belief that a specific health action will prevent, or cure, illness. Eventually, a person course of action often depends on his or her perceptions of the benefits and the barriers that relate to health behaviour.

However, the Health Belief Model does not consider repeated behaviour and therefore it may affect the decision of an individual or elderly person by accepting a recommended action such as smoking, alcohol abuse. Also it fails to highlight behaviours that are performed without any health connections for example social acceptability which has no relationship with health issues.

2.3 Empirical Review

This section examines empirical studies related to the research problem. It is divided into four sections corresponding to the four independent variables: family support, cultural beliefs, social protection, and transportation system.

2.3.1 Family Support and Access to Health Care

Family support refers to assistance accorded to the elderly by members of their nuclear or extended families. It may come in different forms including provision of tangible goods such as foods, services such as doing grocery, companionship, and moral support (Family Agency, 2014). The relationship between family support and access to health care by the elderly was captured in the study by Rohmawati (2017) that delved into factors that shaped visits to a leading elderly healthcare centre located in one community in India. Data was collected from 58 elderly persons that were selected systematically from the community. Several factors were scrutinised including gender, age, attitude, occupation, economic status, and family support. Results showed that family support was among the factors that were highly correlated with the level of visitation to the health care centre by the elderly. Older people who had higher levels of family support recorded higher level of visitation.

However, the study by Rohmawati (2017) did not provide details regarding how family support was measured. Given that family support is quite a broad construct, it is not clear which forms of family support have an impact on the elderly's access to healthcare. The current study looked into the impact of different types of family support, such as domestic

companionship, material aid, and emotional support, on children's behaviour. In a relationship, household companionship refers to the ability to demonstrate empathy, compassion, and real concern for elderly people, as well as providing love, support, reassurance, acceptance, and encouragement. It is an essential component of a successful relationship, since it stabilises the partnership and offers a strong basis for both individuals, especially during times of stress or despair (Reinhard et al., 2011).

Family support may also come in the form of material support such provision of food, transport services, and caregiving. In their study focusing on elderly population in a rural province in Thailand, Yodmai et al. (2018) observed that elder persons who received material support from children had better quality of life than those who relied on their own resources. However, the study focused on quality of life with access to health being considered as just a subset. Consequently, access to health by the elderly was not explored in depth. Shu et al. (2021) also found that economic support from children helped rural elderly persons in China to solve life problems and enabled them to meet various basic needs including medical needs. In addition, the author noted that the elderly persons who received financial support from children were more likely to have greater life satisfaction and has an energy enhancing effect. Equally found that non-economic support such emotional comfort was also important to the elderly person with health challenges. These findings introduce another form of family support that is the emotional comfort.

In the study, by Hung et al. (2016) there was evidence that the level of emotional support extended to the elderly with arthritis in the USA determined their experiences. The study used the cross-sectional design that entailed analysing secondary nationwide data belonging to 11,656 older persons with arthritis. Emotional support was measured in terms of finding out the extent to which the elderly felt that their kin understood their experiences, they could rely on their kin in case of serious problems, and also they could open up to their kin and talk about their worries. It is clear that the author used the relationship between the elderly and their kin as a proxy indicator of the amount of emotional support that the elderly receive. The esults showed that respondents who scored highly on these items had more pleasant experiences marked by less pain and low incidences of depression as compared to those who recorded low emotional support score. However, this study was conducted in the USA where the cultural and social environmental context is different from that of Kenya. Consequently, there were concerns regarding the extent to which this study could reflect the level of

emotional support according to elderly persons living in the informal settlements in Kenya and how this form of support shape their access to health care.

The role of companionship on access to health care by the elderly was also documented by Wariuko et al. (2017), who examined the elderly population in Kibera slum in Nairobi Kenya. The study utilised the descriptive research design and collected data from a sample of 399 respondents who were selected systematically. Results showed that family support was linked significantly to the level of healthcare access by the elderly. Qualitative findings revealed that being present for the elderly, bonding with them on a regular basis, and providing them with words of comfort tend to increase their health seeking behaviours by enhancing their life satisfaction and, consequently, strengthening their will to live. However, in this study, the link between companionship and healthcare access is established quantitatively through the use of frequencies and percentages. The study also sought to test this relationship qualitatively by use of cross-tabulation in order to determine the significance of this factor. The findings are also in line with the study by Mustika and Harini (2017) that assessed depression levels among the elderly in Selemadeg village in India. Findings revealed that the elderly who have their spouses during old age were less likely to access care than those who have lost their spouses. This study was conducted in India and thus findings may not reflect the situation in Kenya due to contextual differences between the two countries.

2.3.2 Cultural Beliefs and Access to Health Care

Culture beliefs are values and perceptions that relate to health care practices and can be experienced in society. They are determined by the geographical setting of an individual, family background, and experiences (Shahin et al., 2019). A cultural belief is vital in shaping the environmental behaviours and perceptions of aging group in terms of social norms, values as well as their roles in the society. Cultural beliefs can also shape access to care by influencing the elderly health seeking behaviours. Cultural beliefs that shape the elderly access to health care can be classified into three major categories: religious beliefs, beliefs in traditional medicine, and cultural taboos (Mc Laughlin, 2016).

The study by Zamir et al. (2018) specifically in the case of the Jewish elderly persons living in Israel established that the religious beliefs had a positive influence on their will to live, which in turn, promoted health seeking behaviour. In particular, the authors noted that the Jewish elderly religious belief of their purpose in life was to achieve spiritual elevation, and this gave them meaning and increased their commitment to deal with challenges associated

with aging. However, this study utilised a qualitative approach where 25 Jewish elders were interviewed. Although the approach facilitated the generation of in-depth data, it did not allow statistical testing of the link between religious beliefs and health care access. In addition, the small sample also limits the generalisation of these findings. The current study sought to address these gaps by testing the link between religious beliefs and health care access using a large sample.

On the other hand, Kahissay et al. (2017) observed that the religious beliefs held by elderly persons in rural areas of North-eastern Ethiopia had a negative influence on their health seeking behaviours. Specifically, the study found that most communities in the area of research held the belief that illnesses emerge from supernatural forces. Consequently, most individual seek spiritual interventions rather than conventional health care whenever they fall ill. This belief tends to hamper the health seeking behaviours of the elderly in the community. This also utilised qualitative approach and therefore the significance of the relationship between religious beliefs and health care access was not statistically tested. The findings of the study also contradict those of Zamir et al. (2018) suggesting that connection between religious beliefs and health care access vary from one context to the next and; hence, the need for a study that specifically explores the Kenya context.

Another cultural belief that has been found to shape the elderly access to health care is their belief in traditional medicine. This aspect is documented in the study by Mamman and Attah (2019) that delved into the health seeking behaviours of the elderly population in Kokona Local Government area in Nigeria. Results showed that elderly person in this area relied on informal health care, folk and home remedies, and faith and traditional healers out of habit and personal beliefs. Reliance on traditional medicine tends to reduce the tendency to seek conventional health care. The findings imply that there is a negative association between beliefs in traditional medicine and health care access by the elderly. However, the association was not explicitly tested.

More important, in the Kenya context, Gakuya et al. (2020) observed that usage of traditional medicine was prevalent. However, this utilisation is largely driven by the inability of the conventional health care system to cope with demand and high cost of conventional care rather than beliefs among the people of Kenya in reference to their health. The study was conducted among the general population rather than the elderly in the informal settlement.

Consequently, its findings may not reflect the level of utilisation of traditional medicine in the elderly population in the informal settlements and factors that drive this utilisation.

Abubakar (2013) also found that the health-seeking behaviour of people at the Kenya coast was influenced by utilisation of various forms of traditional healing including herbs and religious rituals and rites. The study also found that health seeking behaviour was also hampered by cultural taboos such as those barring men from exposing the nakedness to women, those barring women from being touched by men who are not their spouses, and those barring older persons from nakedness to younger persons. However, the study also focused on the general population rather than the elderly population living in the informal settlements.

2.3.3 Social Protection and Access to Health Care

Social protection is a term that refers to broad range of programmes or schemes aimed at reducing the vulnerability of a specific group of people such as the poor, orphans, or the elderly (Vaziralli, 2020). These programmes focus on enhancing the capacity of the vulnerable populations to manage shocks and social risks such as exclusion, sickness, and old age. These include cash transfer programmes, retirement schemes or social security schemes, medical insurance such as National Hospital Insurance Fund (NHIF) (Jerving, 2020).

In their systematic literature review, Owusu-Addo et al. (2018) found that cash transfer programmes implemented in various countries in Sub-Saharan Africa had a positive impact on the utilisation of various health care services including curative care, immunisation, antenatal visits, and hospital delivery. The cash transfer also enabled household to invest in intermediate determinants of health such as good nutrition and proper housing. Although the review establishes a connection between cash transfer and access to health care, it focused on the general population rather than the elderly population. Consequently, it did not capture the extent to which cash transfer programmes that target older person are implemented in the region and their impact on access to health care within this population.

In another study, Heri and Aquila (2019) established that the continued expansion of old age pension schemes in Mexico had a positive impact on the utilisation of formal health care services. Specifically, results showed that having retirement benefits increased health care utilisation by 15 percentage points for those with pre-existing condition and 7.5% points for those without pre-existing medical conditions. The study used the longitudinal data where

data on health care utilisation for 2,324 older persons was collected annually over a period of 4-years. Although the study provide strong evidence regarding the link between retirement benefits schemes and health care utilisation, the contextual differences between Mexico and Kenya limits the generalisation of its findings to the Kenya situation.

Additionally, in the Kenya context, implementation of the Older Persons Cash Transfer (OPCT) began in 2007 with the aim of helping old persons by transferring to them Kshs. 2,000 per month (Republic of Kenya, 2020). A satisfaction survey conducted by the in 2016 (Republic of Kenya, 2016) revealed that most of the beneficiaries of the OPCT were satisfied and over 90% reported that cash transfer had an impact on their lives. In the survey, 88% of OPCT beneficiaries reported that the cash transferred to them had a positive impact on the health of the household. However, the survey was descriptive in nature and therefore, the significance of the link between OPCT and access to health care by the elderly population was not statistically tested. The current study addressed this gap by examining the relationship using robust inferential statistics. In addition, the survey by the Republic of Kenya focused on the population of adult under OPCT across the country rather than the elderly leaving in the informal settlements. Consequently, this survey did not shed light regarding the proportion of the elderly in the informal settlement that are enrolled in the programme and their level of satisfaction with the programme. The current study sought to fill this gap.

Apart from cash transfer and pension schemes, government can implement other interventions that target the elderly. One of the intervention implemented in the Kenyan context is the health insurance subsidy programme (HISP) that provide medical cover for elderly persons and other vulnerable groups who meet eligibility criteria (Kabia et al., 2019). The government funds the programme meaning that the beneficiary gets a medical cover without paying premiums. Another intervention is the free tuberculosis treatment policy. Although this policy applies to Kenyan of all age, (Enos et al.,2018) found that prevalence of TB in the elderly population was still high at 576 positive cases per 100,000 persons. Consequently, free treatment is bound to benefit the elderly population alongside other Kenyans. To assess this factor, respondents were asked to indicate the number of government interventions on health that they have accessed. The current study sought to establish whether such government intervention has a significant influence on access to health care by the elderly population living in informal settlements.

The pension industry in Kenya has also grown significantly with the value of the industry hitting 1.32 trillion in December 2019. Despite the above-mentioned progress, there is still a substantial segment of Kenyans who have not yet joined any pension programmes. The study by Onduko et al. (2015), found that the penetration of retirement benefit schemes was low with 15% of the elderly population enjoying retirement benefits. This implies that 85% of the elderly population does not have retirement benefits and therefore are not guaranteed income at their old age

2.3.4 Transportation System and Access to Health Care

Transportation system refers to the equipment, infrastructure and logistics that elderly people use to move from one place to another. The study sought to assess the nature of the transportation system available to the elderly population in informal settlements in Nakuru and how it impacts their access to health care services. Three elements associated with the transportation system were examined namely costs of transportation, coverage, and mode of transport.

The study by Kerschner and Silversten (2017), observed that in the United States, there are some health care facilities that have developed programmes that provide transportation service for senior citizens who require regular care such as physical therapy, dialysis, or diabetes management. These services are informed by the rationale that most elderly persons with frail health may not be in a position to use existing means of transport. Consequently, this population may need programmes that provide transportation services that support their health needs. Wong et al. (2018), also observed that some cities around that globe were providing public transport concession fare programmes to support the transportation of the elderly. However, no systematic studies have been conducted to examine whether elderly persons in Kenya have access to such services. The current study sought to fill this gap.

Escamilla et al. (2019) observed that despite major improvement in health care facilities in urban areas of Kenya, health care utilisation is hampered by long distances and transportation difficulties. The study measured access to health care facilities offering contraceptive services by residents of Nairobi and Kisumu cities via ‘matatus’. Results uncovered that residents in both cities were on average 1 kilometre away from a facility offering contraceptive services and less than 1 kilometre away from a ‘matatu’ stop providing direct transport to a facility offering these services. Interview data revealed that only 25% women utilised ‘matatus’ to access the contraceptive services and travelled for an average of 30 minutes. The authors

concluded that the low utilisation of ‘matatus’ transportation by the women despite their availability can be attributed to inability to afford the fare paid for transportation services. The authors thus recommended that future studies should examine how the cost of transportation influences access to contraceptive services. It should be noted that the study focus on women access to contraceptive services rather than elderly access to care. Transportation is a more important service to the elderly given that their advanced age may limit them from walking or using certain type of transport. Consequently, the means of transport available is bound to have a more substantial impact on their access to health care.

In another study, Salon and Gulyani (2019) established that public service vehicles popularly known as ‘matatus’ provide a relatively cheap mode of transport in most urban areas in Kenya. These means of transport have made transportation services relatively affordable to residents. However, it should be noted that the condition of elderly persons may limit an individual’s ability to utilise ‘matatus’ compelling him or her to hire more expensive means of transport such as taxi or “tuk tuk”.

2.4 Conceptual Framework

Conceptual framework constitutes the way research relates to the literature on describing a phenomenon (McGaghie et al., 2015). This enhances understanding of how a specific variable is connected to the researcher in the study. The conceptual framework is used by the researcher to develop research questions or hypotheses based on the problem under investigation, as well as supported by a broad framework known as a theoretical framework which entails theories that relate to the researchers' findings on the reason why a particular phenomenon happens. The conceptual framework in Figure 2.1 shows the variables in the study and how they relate to the study.

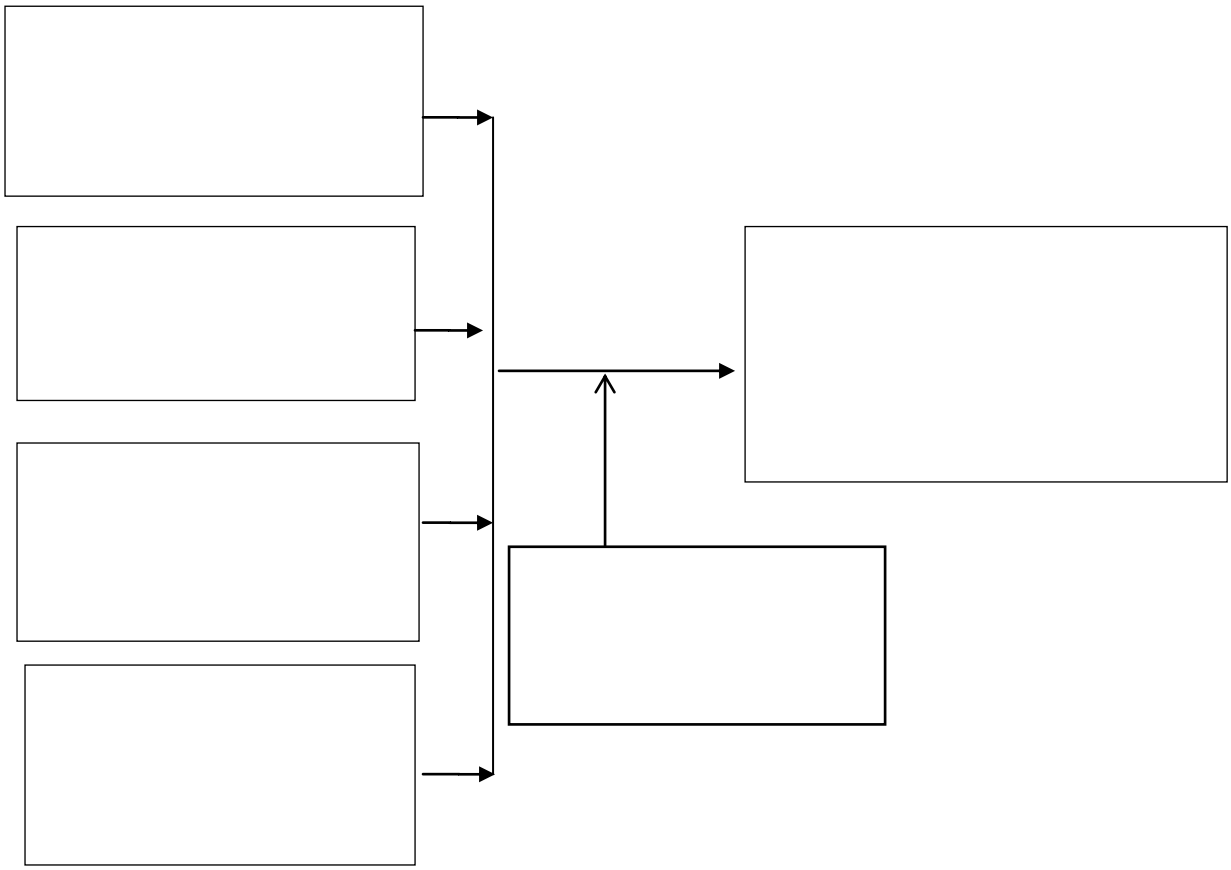


Figure 2.1: Conceptual Framework

Therefore as shown in Figure 2.1 above, the independent variable is family support, cultural beliefs, social protection, transportation system, and the dependent variable is access to health care among elderly persons in informal settlements, therefore in this case there is relationships between family support, cultural beliefs, social protection, transportation system, and dependent variable in access to health care among elderly persons in the informal settlements.

2.5 Summary and Gaps

The literature review presented theories and empirical reviews related to investigating factors influencing access to health care. The review focused on family support, cultural beliefs, social protection, and transportation system. The reviewed studies in this section highlighted the fact that the selected influence elderly person's factors are important in relation to access to health care in an informal settlement. However, research gaps exist which justify the need for the current study. First, the majority of these studies are conducted in private organisations and empirical evidence from public organisations, especially in Kenya. The theories discussed in this study include the Disengagement theory, Social Dependency

Theory, and Health Belief Model (HBM) which explain how the elderly can access health care services. There is, therefore, need to investigate on the factors influencing access to health care among elderly persons in the informal settlements in Nakuru Town, Kenya.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

The chapter explains methods and procedures that were applied in the study. Specifically, the chapter presents the research design, study site, target population, sample size determination, and sampling techniques. It also discusses the data collection tools and how a pilot study or pre-testing was conducted to assess the validity as well as reliability of the research instruments. Data collection procedures and methods that were used to analyse data and present findings are also discussed. The chapter concludes by highlighting the ethical considerations of the study.

3.2 Research Design

The research design to be adopted was descriptive research. The purpose of the descriptive research is to provide an accurate as well as systematic description of the population, situation, or a phenomenon. The design can give solutions to what, where, and how questions, but not the interrogative questions. It can also use wide types of research methods to examine more than one variable. This is contrary to an experimental research, yet the researcher does not manipulate, and control either variables in the study, but rather observes and measures them. The design is also effective in understanding changes in the environment, and is an appropriate choice in this study as it offers access to health care factors among elderly persons.

3.3 The Study location

In the case of Nakuru Town, the study focuses on the informal settlements of Kivumbini, Kaptembwa, Rhoda, Lake View, Flamingo, Kaloleni, and Bondeni. Elderly people in these locations may face health-care concerns as a result of variables such as neglect, poor sanitation, poverty, and community perceptions, beliefs, and conventions about their age, hence influencing their lives in society

3.4 Target Population

Target population of the study were elderly persons between the age of 70 years and above in Kivumbini, Kaptembwa, Rhoda, Lake View, Flamingo, Kaloleni and Bondeni informal settlements, in Nakuru Town, and data obtained from a sample size of 399 respondents. In

this study, a large sample size was used because it provides more dependable results with more precision and power, as well as avoiding errors caused by a small sample size.

3.5 Sampling

Simple random sampling and cluster sampling were used from the target population. The Simple random sampling was used in the study because it is effective in selecting a smaller group or sample from a large population. Also, it provides an equal chance for each participant to be selected in the sample. Cluster sampling on the other hand entails dividing the geographical area to be studied into smaller units called clusters, and it is effective with a large population as well as providing an equal chance for each participant to be selected in the sample. The study, thus, seeks to collect data from a target population of 248,785, who are the whole population in the study area. The sample of 399 respondents, (elderly residents) from the informal settlements in Nakuru town. Below is a graphic representation (Table 3.1 below).

Table 3.1: Sampling Frame

Informal settlement areas	Total of population	Sample for elderly persons
Kivumbini	23,244	44
Kaptembwa	79,480	100
Rhoda	27,787	46
Lake view	21,130	42
Flamingo	36,554	55
Kaloleni	20,240	32
Bondeni	39,350	80
Total	**248,785**	**399**

Source: County Government of Nakuru (2019)

The statistician Taro Yamane in 1967 formulate a method to identify the sample size of the research project from the target population used (Taro,1967). The illustration example for Taro Yamane method is presented below

n=N/ (1+N (e) 2)

Where:

n is the sample size

N is the target population

e is the margin error, which is 0.05

In this case from the table 3.1 above the target population is 248,785, so we have to determine the sample size.

n=N/ (1+N (e) 2)

n=248,785/ (1+248,785 (0.05) 2)

n=248,785/ (1+248,785 (0.0025)

n=248,785/ (1+621.9625)

n=248,785/622.9625

n=399.358

n=399

Therefore, this shows that the sample size of the study is 399 from the target population of 248,785 which is the lower number of responses from the respondents to maintain a 95% confident interval.

3.6 Data Collection Tools

Data was collected using a semi-structured survey questionnaire. This is essential for closed and open-ended questions (Mc Combes, 2019). A semi-structured survey questionnaire is selected because the study seeks to collect both quantitative as well as qualitative data, as well as enhance more knowledge and understanding for the study. Quantitative data is presented in figures or numbers, while qualitative was analysed using thematic analysis. It is important to apply both methods of data collection for validity and reliability of the study.

3.7 Pilot Study/Pre-testing

The pilot study was conducted in Nairobi Town informal settlements such as Kibera slums in order to assess the validity as well as reliability of the questionnaire. Nairobi Town informal settlement such as Kibera slums was selected because it has similar geographical characteristics as informal settlements in Nakuru Town. The pilot involves 10 residents in the area, which is equivalent to 15% of the number of respondents that were involved in the main study. Validity and reliability are essential in the study. Validity means the accuracy of assessment and degree of the method used to assess what is intended to be assessed. The

value of respondents' information also can encourage them to participate in research study willingly. Reliability is the extent to which the results obtained in the study through measurement and procedure yield quality or consistent outcomes. When questions are well checked it can meet the understanding or standards of the research, while in some cases of respondents inability to answer questions due to illiteracy level researcher can assist them by administered the questionnaires for effective information (English & Keeley, 2015). A coefficient that is equal to or greater than 0.7 were taken as a measure of high internal consistency as well as reliability (Shamsabadi et al., 2019).

3.8 Methods of Data Analysis

Data collected in the study involved qualitative and quantitative approaches. Descriptive statistics was used to analyse the data that helps to describe and summarise the data in a useful style such as, a pattern that might result from the data. This contains frequencies and percentages. Hence, mean and standard deviation was applied in measures of central tendency as well as use of Likert scale data (Frost, 2018). Chi-square tests were conducted to influence access to health care among elderly persons in informal settlements. The Statistical Package for Social Sciences (SPSS) version 27 was applied in conducting an analysis. Therefore, in this case, the results of the analysis were presented graphically and the qualitative thematically.

3.9 Ethical Considerations

The researcher sort permission for carrying out the study from National Commission for Science, Technology and Innovation NACOSTI, available elderly homes in the informal settings, and Nakuru County government. Participation in the study was on a voluntary basis and willing persons were required to give their informed consent. The researcher ensured that the 'principle of do no harm' was observed and due to the fact that the research population is among the vulnerable adults, the researcher ensured anonymity and the necessary privacy was adhered to throughout the data collection period. The confidentiality of information provided by respondents was adhered to for research purposes only. All information obtained from various sources was cited using a proper format with the provision of references to avoid plagiarism, as well as subjection from the plagiarism checker.

CHAPTER FOUR
DATA ANALYSIS, PRESENTATION, AND INTERPRETATION

4.1 Introduction

This chapter is the data analysis of the collected data. Objectives of the study are used in relation to evaluated results. The study was designed and carried out in order to assess, analyse and identify factors influencing access to health care among elderly persons in the informal settlements in Nakuru town, Kenya.

4.2 Response Rate

The data was collected from 399 elderly persons in the sample size issued between the age of 70 years and above in the study. 380 survey questionnaires were returned giving a 95.2% response rate. The 95.2% return rate was found to be adequate in the study. According to Dell Ralph, Holleran Steve and Ramakrishnan Rajasekhar (2002) and also Sullivan (2005), 50% return rate is adequate for a study hence the total return rate of 95.2% of the respondents are representative enough. Some of the respondents were assisted by researcher to answer some questions.

4.3 Demographic Factors

The study was designed to determine the demographic factors of the respondents. The results are presented in the various sections which include the age, gender, and marital status, level of education, occupation and number of living children of elderly persons in the informal settlements such as in Kivumbini, Kaptembwa, Rhoda, Lake View, Flamingo, Kaloleni and Bondeni in Nakuru Town, Kenya.

4.3.1 Age

Age was also considered to be an essential determinant of access to health care that relate to cash transfer, the government interventions and retirement schemes for the elderly. The age of the respondents is presented in Table 4.1 below.

Table 4.1: Age of Respondents

Age Category	Frequency	Percent
70 - 75 years	86	22.6%
76 - 81 years	219	57.6%
82 - 87 years	36	9.5%
88 - 93 years	26	6.8%
Above 94 years	13	3.4%
Total	**380**	**100.0%**

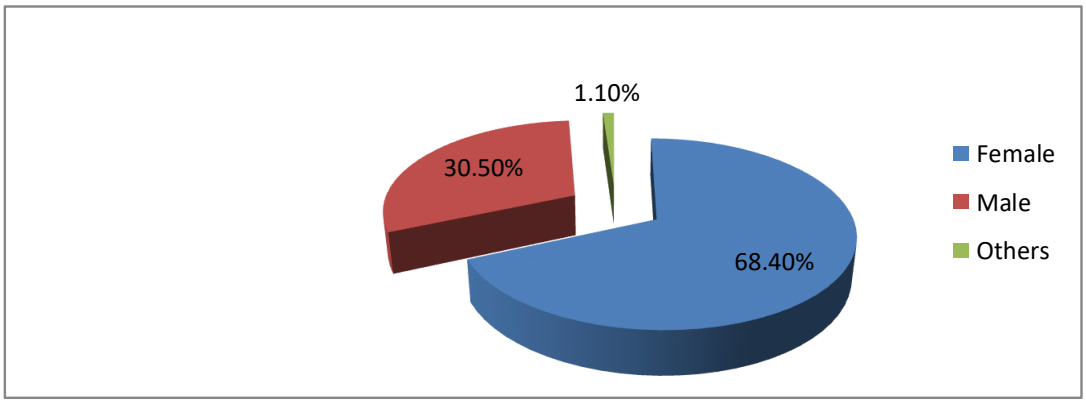
Source: Field Data, (2021)

The findings in Table 4.1 above from the tallied total of 380 sampled populations, shows that more than half (57.6%) were aged between 76 and 81 years, which was the leading population in the informal settlements setting (Owuor, 2014) according to the study. This is seen as most appropriate age bracket where the elderly people suffer from lack of proper access to health care services in the community. While 22.6% were in the 70 and 75 years age categories. About 9.5% of the respondents disclosed their ages as between 82 and 87 years. Also, it shows that 6.8% were in the age of 88 and 93 years, while another 3.4% indicated that they were above 94 years.

4.3.2 Gender of Respondents

Gender of the respondents was considered to be key in the study for comparison purposes to highlight which gender tends to live longer than the other. The results are captured in Figure 4.1 below.

Figure 4.1: Gender of Respondents



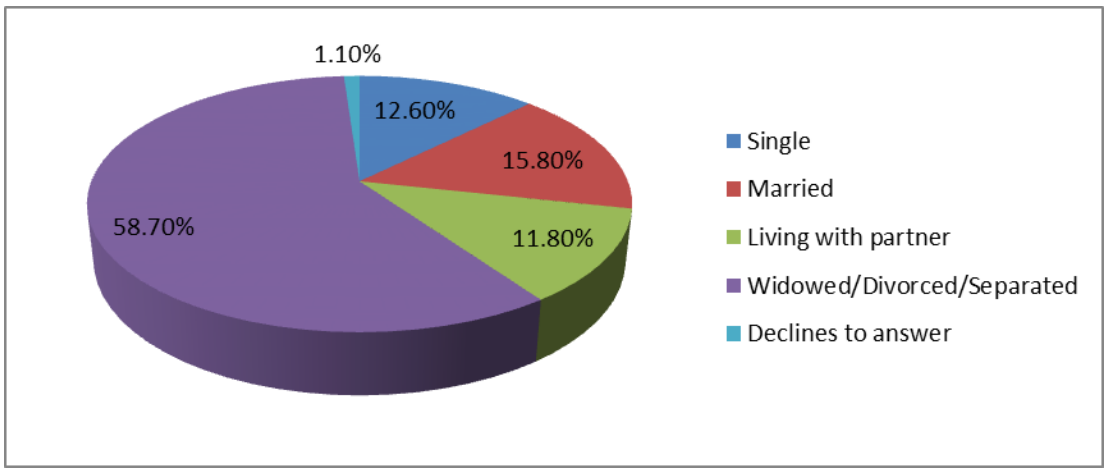
Source: Field Data, (2021)

As shown in Figure 4.1 above, slightly more than half (68.4%) of the respondents who participated in the study were female. While the rest were (30.5%) and also 1.1% were male and other gender respectively. The findings are similar to that of the Kenya National Bureau of Statistics (2019) which shows that there is higher mortality rate among the male gender as opposed to the female gender leading to an increase in number of women than men at old age.

4.3.3 Marital Status

Respondents were also asked to indicate their marital status. Marital status was determined through the factors such as single, married, living with partner, widowed/divorced/separated and declines to answer, which would be an influencing factor among the elderly persons on access to health care services. This information is captured in Figure 4.2 below.

Figure 4.2: Respondents Marital Status



Source: Field Data, (2021)

Most of the respondents who participated in the study were widowed or divorced or separated (58.7%), other respondents were married (15.8%), while about 12.6% and 11.8% were single and living with their partner respectively. The smallest proportion of the respondents, 1.1% declined to respond.

4.3.4 Highest complete level of education

The analysis sought to determine the level of education of the respondents as represented in the sample. The level of education was also considered to be one of the factors that moderate the relationship between elderly persons and access to health care services. This information is shown in Table 4.2 below.

Table 4.2: Respondents' Highest Education Level

Education Level	Frequency	Percent
No education	172	45.3%
Primary education	128	33.7%
Secondary education	38	10.0%
Tertiary education	31	8.2%
Others	7	1.8%
Decline	4	1.1%
Total	**380**	**100.0%**

Source: Field Data, (2021)

The findings from Table 4.2 above reveals that the majority (45.3%) of the respondents had no education, 33.7% attained primary school level, 10% of the respondents attained secondary education level, 8.2% had tertiary education and others had 1.8%, while the rest with 1.1% declined to answer and some could not remember.

4.3.5 Occupation of the Respondents

The study also established the occupation of respondents because it was an important variable regarding access to healthcare. This is captured in Table 4.3 below.

Table 4.3: Respondents' Occupation

Occupation	Frequency	Percent
Unemployed/housewife/houseman	171	45.0%
Agriculture	111	29.2%
Unskilled manual	44	11.6%
Skilled	10	2.6%
Sales & Services	12	3.2%
Clerical	9	2.4%
Professional technical/managerial	8	2.1%
Student	7	1.8%
Others	8	2.1%
Total	**380**	**100.0%**

Source: Field Data, (2021)

45% of the respondents were not employed due to their old age and some were able to access retirement policy for their old age. 29.2% were involved in Agriculture due to their passion of farming such as small scale farming, 11.6% were involve in unskilled manual, while 3.2% work for sales and services, 2.9% had skills, 2.4% were involved in clerical work, 2.1% had professional, technical or managerial skills and others had jobs. , 1.8% was involved in different types of studies.

4.3.6 Living Children

Approximately 70% of the respondents have children but most of the children are busy with their daily work activities that lead to old people being left alone at their homes. 15% had assistance from the community to access elderly home for proper care by the government, 10% indicate that their children were in a position to assist them by ensuring provision of health care services, while 5% stated that they had no children due to barrenness or because of other health problems.

4.4 Access to Health Care among Elderly Persons

The dependent variable of the study was access to health care among elderly persons in the informal settlement in Nakuru town. Several indicators were used to assess this variable which includes the affordability, acceptability and availability. This information is captured in Table 4.4 below.

4.4.1 Distance from Nearest Health Facility

The respondents were asked to state the distance of public health facility from their residential area. Their answers are as shown in Table 4.4 below.

Table 4.4: Distance from Nearest Health Facility

Distance	Frequency	Percent
More than 4 kilometers	47	12.4%
3 to 4 kilometers	60	15.8%
1 to2 kilometers	232	61.1%
Less than 1 kilometers	41	10.8%
Total	**380**	**100.0%**

Source: Field Data, (2021)

The finding from Table 4.4 above concur with the observation by Wairiuko et al., (2017) where most of the respondents residence in the area of study lived 1 to 2 kilometers away from public hospital were 61.1%, between 3 to 4 kilometer were 15.8%, and those who were more than 4 kilometers away were 12.4%, and finally those who were nearer public facility were 10.8%.

4.4.2 Inability to access Health Care in the Last 3 Months due to Transport

As displayed in Table 4.5 below, the analysis was done to establish inability of the respondents in accessing health care facility when they are in need of services especially due to lack of transport. The data analysis captures the period of the last 3 months. The number of

times of the respondents has a bearing on their access to health care service facility especially in terms of elderly persons and transportation system used.

Table 4.5: Distribution of Respondents based on Inability to Access Health Care

Number of Times	Frequency	Percent
On a Daily Basis	256	67.4%
On a weekly basis	77	20.3%
On a monthly basis	37	9.7%
None at all	10	2.6%
Total	**380**	**100.0%**

Source: Field Data, (2021)

As shown in Table 4.5 above, most of the respondents (67.4%) on a daily basis, had the need to access to the health care but unable because of lack of transport, 20.3% indicated on a weekly basis, while 9.7% on a monthly basis, and a few with 2.6% did not need any health care services.

4.4.3 Access to Special Services for Elderly People

It was also necessary to establish accessibility to special services for elderly People. The responses are captured in Table 4.6 below.

Table 4.6: Distribution of Respondents based on Access to Special Services

Number of Special Services	Frequency	Percent
None	147	38.7%
Rarely	218	57.4%
Regularly	15	3.9%
Total	**380**	**100.0%**

Source: Field Data, (2021)

The results in Table 4.6 above show the frequent visit to public health facility and also unavailability of finding the special services for elderly people. The respondents were slightly more than half on rarely visits (57.4%), while 38.7% indicated that they had none, and about 3.9% had regular visits. These findings implied that the greatest portion of the respondents visiting health facility in most cases do not find any special services for elderly people. This supports Wairiuko et al., (2017) who in his research found that most of the elderly persons are unable to find special services in public health facilities.

4.4.4 Inability to access Health Care due to Financial Problems

Table 4.7 below indicates the findings on the inability of respondents in the informal settlements in Nakuru town access to health care due to financial problems in the informal settlements.

Table 4.7: Unable to Access Health Care due to Financial Problems

Number of Time	Frequency	Percent
On a daily basis	281	73.9%
On a weekly basis	62	16.3%
On a monthly basis	27	7.1%
None at all	10	2.6%
Total	**380**	**100.0%**

Source: Field Data, (2021)

From the results in Table 4.7 above, on frequency of sickness but unable to seek medical help due to financial problems, on a daily basis it lead with 73.9% were unable to access care due to financial problems on a weekly basis, 16.3% on a monthly basis 7.1% and finally those who selected 'none at all' were 2.6% respondents. The findings indicate that most of the elderly persons lack finance in the utilisation of health services which affect their visit to public health facilities even when they are sick at home, hence affecting their general health.

4.4.5 Respondents Rating of Service Waiting Time

Respondents were asked to indicate the rate of time spend in the public hospital with health care provider. This rate was determined through the factors such as very poor, poor, all right, good and very good, which will influence elderly persons on access to health care services. This information is captured in Table 4.8 below.

Table 4.8: Respondents' views on Waiting Time

Number of Time	Frequency	Percent
Very poor	74	19.5%
Poor	226	59.5%
All right	36	9.5%
Good	32	8.4%
Very good	12	3.2%
Total	**380**	**100.0%**

Source: Field Data, (2021)

The finding in Table 4.8 above reveals that, 59.5% indicated that the length of time they had with the health care provider was poor. This concurs with the findings of Appleby, (2013)

from the previous study captured in the literature in this study. 19.5% rated the length of time as very poor, 9.5% were all right with the time, while 8.4% indicated that the length of time was good and 3.2% said that it was very good. The result from the analysis indicates that most of the elderly persons are not satisfied with the time they are given to meet with health care worker in public health facilities.

4.4.6 Distribution of Respondents based on Access to Health Care

Table 4.9 below shows that the majority (70.3%) of the elderly persons had low access to health care while 29.7% had high access to health care.

Table 4.9: Respondents distribution on access to health care

Access to Health Care	Frequency	Percent
Low Access	267	70.3%
High Access	113	29.7%
Total	**380**	**100.0%**

Source: Field Data, (2021)

The participants' respondents on the five questions on access to health care were combined in order to compute an overall access to health care score for each respondent. The overall score ranged between 5 for respondents with the lowest access to 20 for respondents with the highest score. This data was recorded into categorical data with a score of 10 or below being coded as having low access to health care and those with scores of above 10 being coded as having high access to health care.

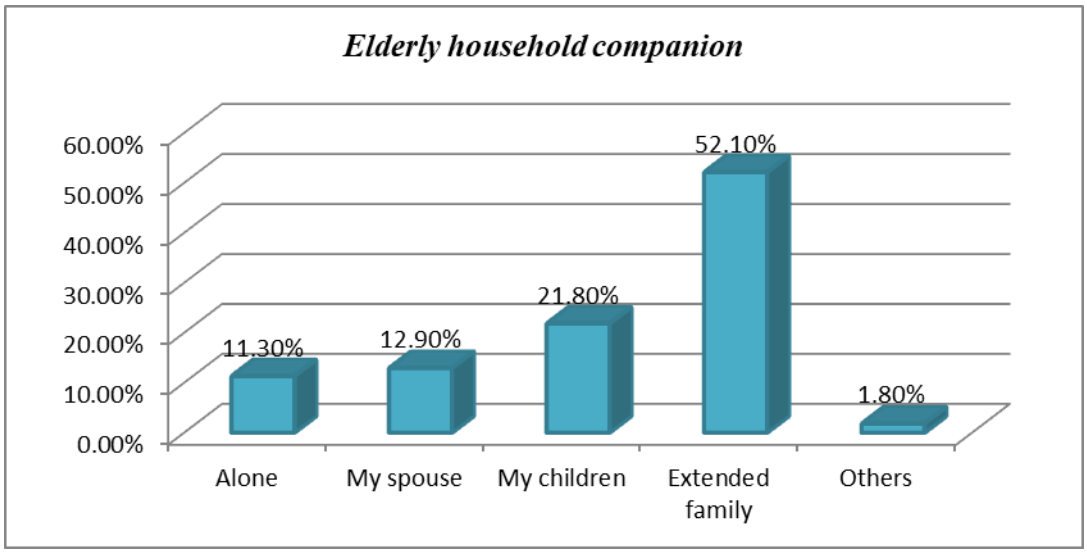
4.4 Family Support and Access to Health Care

The first objective of the study was to examine how family support influences access to health care among elderly persons in informal settlements in Nakuru Town. Family support is the care provided to elderly in their access to health care services. The main aim of this variable is to protect health, well-being as well as rights of various people in the community. This is important to the old age population across the world, and it can be done through household companion, assistance from children, relations with family members, and satisfaction from family in order that it may enhance social relationships in the community (Family Agency, 2014).

4.4.1 Household Companion and Access to Health Care

The study also attempted to establish the people living in the same household with the respondents in order to determine whether this factor has an influence on their access to healthcare. The information is presented in Figure 4.3 below.

Figure 4.3: Household Companion



Source: Field Data, (2021)

According to Figure 4.3 above, the majority of the respondents (52.1%) live with extended family members. This finding is consistent with that of Wu (2020) in a study in the USA who also found that family members are the main caregivers caring for older adults. About 22% were living with their children while 12.9% with their spouse. About 1.8% of the respondents selected the "others" option meaning that they were living with individuals who did not fit in the options provided. Only 11.3% of the respondents indicated that they were living alone. These findings imply that only a small portion of the elderly population in the informal settlements in Kenya suffer from social isolation, which is linked to poor physical and mental health status(Wu, 2020). Social isolation tends to decrease both the material and emotional support to the elderly leading to poor health status. The cross-tabulation with chi-square test was used to assess whether there is a relationship between the form of companionship and access to health care by the elderly persons living in informal settlements. Table 4.10 below presents the results of the analysis.

Table 4.10: Cross-Tabulation of Household Companion and Access to Health Care

		Access to Health care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Whom do you live with	Alone	35 (81.2)	8 (18.6)	43(100)
	My Spouse	36 (73.5)	13 (26.5)	49 (100)
	My Children	63 (75.9)	20 (24.1)	83(100)
	Extended family	128(64.6)	70(35.4)	198(100)
Pearson Chi-square (X^2 = 7.642, df=3, p=.054)				

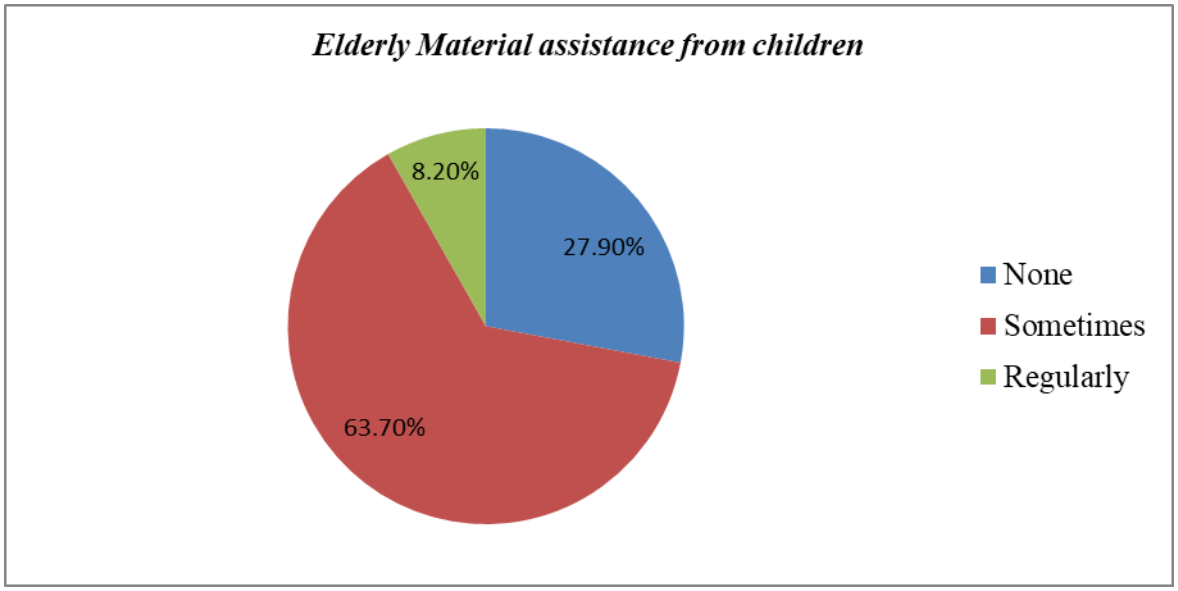
Source: Field Data, (2021)

Table 4.10 above reveals that the proportion of elderly persons with high access to health care was highest in the extended family category (35.4%) followed by the category of elders living with their spouses (26.5%), and the category living with their children (24.1%). The proportion was lowest in the category of the elderly living alone (18.6%). The chi-square test (X^2= 7.642, p=.054) however showed that elders household companion is not statistically significantly associated with access to health care by the elderly person as the p-value was greater than the 0.05 level of significance. These findings imply that the people the elderly persons live with do not provide a satisfactory account of the level of access to health care by elderly in informal settlements, Nakuru Town. In fact, findings show that the majority of elderly in the area (52.10%) live with extended family and thus this factor cannot explain why most of elderly persons have low access to health care. The most plausible explanation is that having a companion to live with does not guarantee access to health care but rather the kind of assistance that this companion provides. It is possible for an elderly person to have household companions that do not provide any notable assistance. This premise informed the analysis in the next section.

4.4.2 Material Assistance and Access to Health Care

Respondents were asked to indicate the level of material assistance that they get from their kin on a three-point scale (none, sometimes, and regularly). Information is captured in Figure 4.4 below.

Figure 4.4: Assistance from Children



Source: Field Data, (2021)

The finding in Figure 4.4 above shows that the majority of the respondents (63.7%) indicated that they receive material assistance from their family sometimes. This finding implies that most elderly persons receive some form of assistance from their kin but the assistance is not often consistent. Only 8.2% of the respondents acknowledged receiving assistance from their kin on a regular basis while 27.9% indicated that they did not receive any assistance at all. These findings are consistent with the study by Chepngeno-Langat et al., (2019), who found that due to the poverty situations in the informal settlement, many family members particularly children are not able to provide consistent support to their elderly kin. In fact, it was established that it is the elderly persons who provide support to the younger family members by redistributing the cash that they receive from government programmes. In a follow-up, open-ended question, respondents were asked to indicate the form of assistance that they receive from their family members. The majority mentioned that they receive assistance in the form of finances. Other forms of assistance were caregiving and material support such as food and clothing. The data on material assistance was cross-tabulated with access to health care in order to determine whether there is a relationship between the two variables. Table 4.11 below is a presentation of the results.

Table 4.11: Cross-Tabulation of Material Assistance and Access to Health Care

		Access to Health care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Do you receive any assistance from your family	None	212(87.6)	30(12.4)	242(100)
	Sometimes	16(51.6)	15(48.4)	31(100)
	Regularly	39 (36.8)	67 (63.2)	106(100)
Pearson Chi-square (X^2 = 97.166, df=2, p=.000)				

Source: Field Data, (2021)

Table 4.11 above shows that in the category of adults who receive regular support from their family, the majority of the respondents (63.2%) had high access to health care. Whereas in the category that receive assistance sometimes, less than 50% had high access to health care. In the category that receives no assistance at all, the proportion of respondents with high access to health was 12.4%. These findings imply that there is a positive relationship between receiving assistance from family and accessing health care. The chi-square test shows that the relationship exist in statistics at the 0.01 level of significance (X^2= 97.116, df=2, p=.000). This indicates that receiving assistance from family members has a statistically significant influence of access to health care among the elderly persons living in the informal settlements in Nakuru town. These findings are consistent with the social dependency theory, which asserts that the elderly need help or assistance from other people in accessing health care (Yuill, Crinson, & Duncan, 2010). Thus, receiving any assistance determines how easy or how hard it is for the elderly to access health care services.

4.4.3 Emotional Support with Family Members

Another form of family support that was examined was emotional support. In order to assess this factor, respondents were asked to indicate how well they related with the family members on a three-point scale: (not well at all, fair, or very well). The study presumed that how the elderly relate with their kin determines the level of emotional support that they get. Table 4.12 below is a graphic representation.

Table 4.12: Relationship with Family Members

Scale	Frequency	Percent
Not well at all	99	26.1%
Fair	228	60.0%
Very well	53	13.9%
Total	**380**	**100.0%**

Source: Field Data, (2021)

Table 4.12 above indicates that the majority of the respondents (60.0%) relate with the family members fairly well. 26.1% do not relate well at all with their family, while 13.9% relate very well with their family members. The findings are not consistent with the study of Mance (2019), which found that 58% of elderly person in Australia have relationship problems with their family members. The authors explained that old age often comes with care requirements that other family members are expected to fulfil. Prolonged phase of caring for an elderly person may cause significant financial, physical, and mental burdens on the family members leading to poor family relationships. However, current findings suggest that such experiences are not common among the elderly in the informal settlement in Nakuru town or if they are any, they do not cause significant strain on familial relationships. The findings led to the conclusion that most elderly persons in this area receive reasonable amount of emotional support from their families. Data on emotional support was cross-tabulated with data on access to health care in order to determine whether there is a link between the two variables. Results are presented in Table 4.13 below.

Table 4.13: Cross-Tabulation of Emotional Support and Access to Health Care.

		Access to Health care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Do you relate well with your family members	Not well at all	78(78.8)	20 (20.2)	99(100)
	Fairly well	162(71.1)	66(28.9)	228(100)
	Very well	26 (49.1)	27 (50.9)	53(100)
Pearson Chi-square (X^2 = 9.116, df=2, p=.042)				

Source: Field Data, (2021)

Table 4.13 above shows that the proportion of the elderly who had high access to health care was highest in the category of respondents who related very well with the family members (50.9%). This proportion declines to 28.9% in the category of the elderly who relate fairly well with the family members and declines further to 20.2% in the category of respondents who reported that they do not relate well with the family members. These findings suggest that there is a positive association between quality of family relations and access to health care by the elderly. They indicate that elderly persons who have high quality family relationships are more likely to have high access to health care services. The chi-square test shows that the relationship between family relation and health care access exist statistically at the 0.05 level of significance (X^2= 9.116, df =2, p=.042). These findings are consistent with those of Thomas et al., (2017), who found that poor quality relationships between adult children and elderly parents is detrimental to parents' well-being.

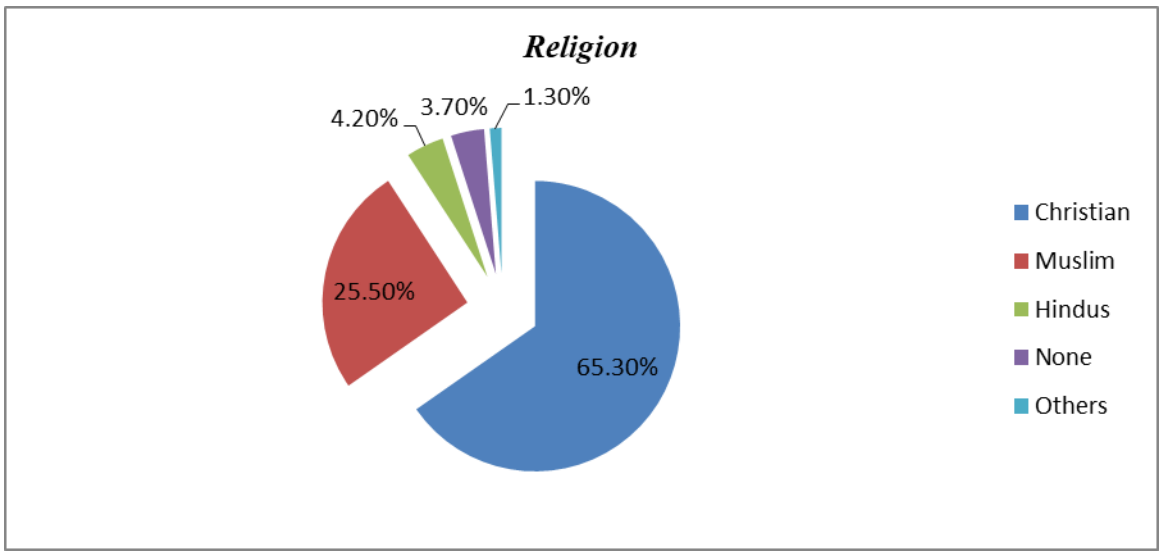
4.5 Cultural Beliefs and Access to Health Care

The second objective of the study was to establish the influence of cultural beliefs on access to health care among elderly persons in the informal settlements in Nakuru Town. Three factors related to cultural beliefs were analysed namely religion, traditional medicine, and taboos.

4.5.1 Religion and Access to Health Care

Respondents were asked to indicate their religious affiliation in order to determine how this factor influences their access to health. Figure 4.5 below captures this information.

Figure 4.5: Respondents Distribution by Religion



Source: Field Data, (2021)

Figure 4.5 above shows that the majority of the respondents (65.3%) were Christians. This finding is consistent with data from the 2019 Population and Housing Census, which showed that Christians are dominant in Nakuru County. 25.5% of the respondents were Muslim, which is also consistent with the census report that indicated that there is sizable Islamic population in Nakuru County. Hindus made up 4.2%, while 3.7% were not affiliated to any religion, and 1.3% subscribed to other religious faiths. The data on distribution of respondent by religion was cross-tabulated with that of health care access in order to determine the relationship between these two variables. But first, Hindus, Atheist, and those who subscribed to other religious faiths were merged into one category that was named "others'' because their proportion were small and thus could have diminished the power of the test to detect a significant relationship. Table 4.14 below is a representation of the results.

Table 4.14: Cross-Tabulation of Religion and Access to Health Care

		Access to Health care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
What is your religion	Christian	180 (72.6)	68 (27.4)	248 (100)
	Muslim	68 (70.1)	29 (29.9)	97 (100)
	Others	19 (54.3)	16 (45.7)	35 (100)

Pearson Chi-square (X^2 = 4.915, df=2, p=.086)

Source: Field Data, (2021)

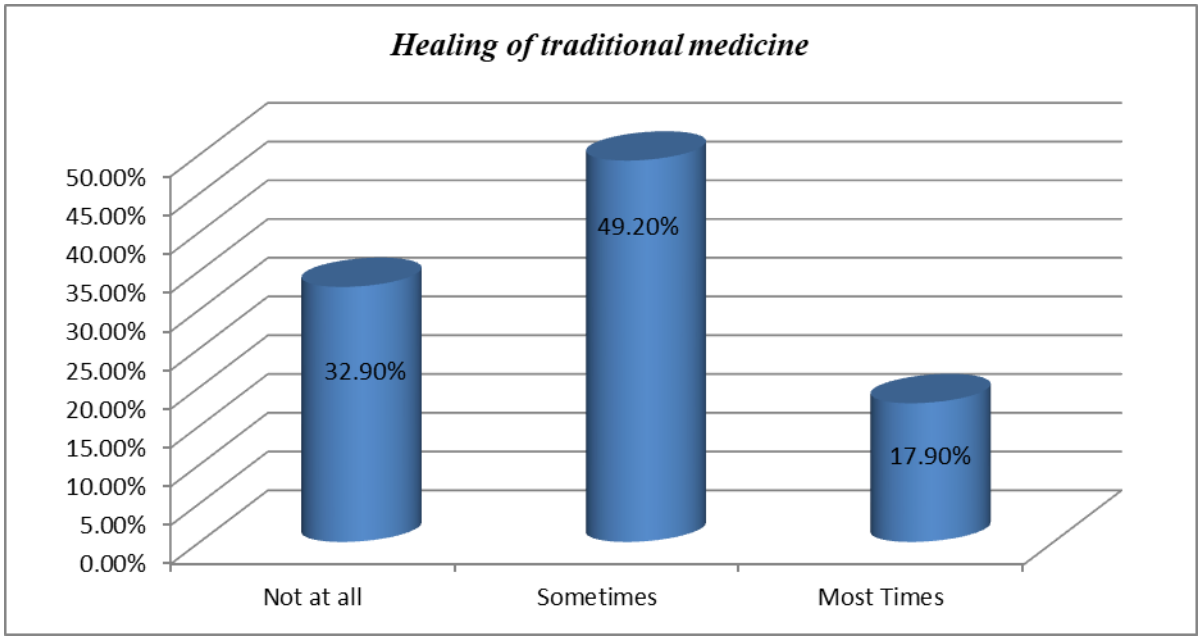
Results in Table 4.14 above show that the "others" category had the highest proportion of respondents with high access to health care (45.7%), those in the Muslim and Christian categories had almost similar proportions of 29.9% and 27.4%. These finding suggests that elders of other religious affiliation are more likely to have high access to health care than those affliated to the two mainstream religions. However, the chi-square test suggest that the difference in the proportion of the elderly with low or high access to health care across the three religious categories does not exist statistically (X^2= 4.915, df=2, p=.086). The findings imply that there is a high probability that the differences observed in access to health care across the three category is as result of chance and may not reflect the situation in the population from which the sample was drawn.

The findings are not congruent with the study by Kahissay et al. (2017), which observed that the religious beliefs of the Tuheledere community in Ethiopia shaped their perception about causes of illnesses and; consequently, their health seeking behaviours. Most community members believed that diseases were caused by supernatural forces and; therefore, sought spiritual intervention rather than conventional health care when they fall ill. Current findings suggest that this phenomenon is not significant among the elderly population in Nakuru town.

4.5.2 Traditional Medicine and Access to Health Care

The second cultural issue that was interrogated is belief regarding traditional medicine. Respondents were asked to indicate whether they believe that traditional medicine can heal their illnesses. Their views are captured in Figure 4.6 below.

Figure 4.6: Respondents' Beliefs on Traditional Medicine



Source: Field Data, (2021)

Figure 4.6 above illustrates that the largest segment of the respondents (49.2%) held the belief that traditional medicine could heal them sometimes. This means that they believed that traditional medicine could heal some cases and illness but not all. Another 17.9% believed in traditional medicine most of the times. This means that they are likely to go for traditional medicine whether they fall sick regardless of the type of illness. These findings imply that over two-thirds of the elderly population in Nakuru County believe in tradition medicine either moderately or strongly.

Only 32.9% of the respondents reported that they do not believe at all that traditional medicine can heal them. These findings are congruent with the study by Gakuya et al. (2020), who found out that there is widespread use of traditional medicine in Kenya due to the long history associated with the use of traditional medicine, inability of the conventional health care system to cope with demand, high cost of conventional care, and rise in the number of scientific work validating traditional medicine. However, the use of traditional medicine is hampered by plummeting plant resources and low utility of most medications. The data on traditional medicine was cross-tabulated with that on access to health care assessing the relationship between the two. Table 4.15 below is a graphic presentation.

Table 4.15: Cross-Tabulation of Traditional Medicine and Access to Health Care

		Access to health care category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Do you believe that traditional medicine can heal you	Not at all	47 (69.1)	21 (30.9)	68 (100)
	Sometimes	113 (60.4)	39.6 (39.6)	187 (100)
	Most Times	107 (85.6)	18 (14.4)	125 (100)

Pearson Chi-square (X^2 = 22.772, df=2, p=.000)

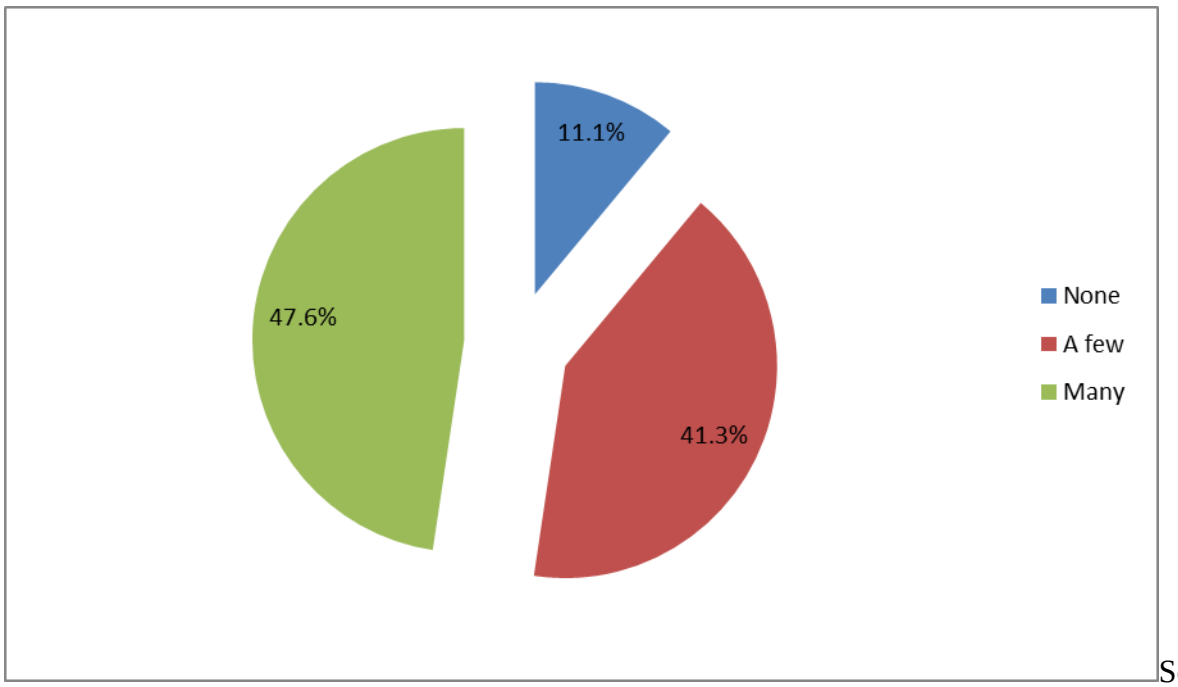
Source: Field Data, (2021)

Table 4.15 above shows that the category of respondents who believe in traditional medicine sometimes had the highest proportion of the elderly with high access to health care (39.6%), followed by those who do not believe in traditional medicine at all (30.9%). This proportion was lowest in the category that believes in traditional medicine most of the time (14.4%). These findings suggest that access to health care is likely to be low among elder persons who share strong beliefs in traditional medicine. The chi-square test shows that the association between beliefs in traditional medicine and health care access is statistically determined at the 0.01 level of significance (X^2= 22.772, df= 2, p=.000). These findings are consistent with Gakuya et al. (2020), who noted that individual who have strong belief in traditional medicine are more likely to seek traditional treatment than conventional care when they fall ill. Consequently, these beliefs have a negative effect on usage of conventional health care services.

4.5.3 Cultural Taboos and Access to Health Care

The final cultural factor that was interrogated was taboos related to health care. A question was included in the survey to interrogate this variable. Figure 4.7 below captures the results.

Figure 4.7: Cultural Taboos Concerning Health Care



Source: Field Data, (2021)

Figure 4.7 above illustrates that the largest segment of the respondents (47.6%) had many taboos related to healthcare issues. Another 41.3% reported that they had a few taboos on health care. These findings imply that more than 88% of the respondents have some taboos related to health care. Only 11.1% of the respondents reported having no taboos in their cultural setup. In a follow-up, open-ended question, respondents were asked to mention some of the taboos that exist in their communities. What was captured on most of the responses was the belief that illnesses are caused by breaking taboos such as dying wishes of parents. These findings are consistent with the study by Abubakar et al. (2013), who observed that most communities in the Kenya coastal region shared beliefs that illness are caused by violation of traditional taboos. The taboos had a negative effect on the health seeking behaviours of the community because they prompt community members to seek help from traditional healers rather than seek conventional health care. Other issues that emerged from the qualitative data include the elderly concern about being taken care-off by health care profession of the opposite gender or young professional. To establish whether this effect is

present in the elderly population in Nakuru town, the data on health taboos was cross-tabulated with the data on access to health care. Results are captured in Table 4.16 below.

Table 4.16: Cross-Tabulation of Health Taboos and Access to Health Care

		Access to Health care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Are there any taboos concerning health care issues	None	12 (28.6)	30 (71.4)	42 (100)
	A few	89 (56.7)	68 (43.3)	157 (100)
	Many	128 (70.7)	53 (29.3)	181 (100)

Pearson Chi-square (X^2 = 20.396, df=2, p=.000)

Source: Field Data, (2021)

Table 4.16 above illustrates that the category of respondents that reported having no taboos on healthcare had the highest proportion of the elderly with high access to health care services (71.4%). The proportion declines to 43.3% in the category of respondents who had a few taboos and declines further to 29.3% in the category of respondents with many taboos. These findings indicate that there is a no association between presence of taboos related to health and access to health care. The chi-square test indicate that the relationship between taboos on health and access to health care is at the 0.01 level of significance (X^2= 20.396, df= 2, p<.001). These findings reinforces the study by Abubakar et al. (2013), which observed that taboos on health issue motivate individuals to seek traditional treatment rather than convention care and is therefore is an access to health care barrier.

4.6 Social Protection and Access to Health Care

The third objective of the study was to analyse the influence of social protection on access to health care among elderly persons in the informal settlements in Nakuru Town. The study paid attention to three components of social protection namely cash transfer programmes, government intervention in the provision of health services, and retirement schemes.

4.6.1 Cash Transfer and Access to Health Care

The Kenya government has cash transfer programme that target elderly persons known as the Older Persons Cash Transfer (OPCT). The programme targets individuals who are above the age of 65 years, the poor and vulnerable, who do not have a household member receiving regular income from gainful employment (Republic of Kenya, 2020). Beneficiaries receive Kshs. 2000 per month that is disbursed every two months. Since the study targeted elderly persons from the informal settlements, it was presumed that most of them are beneficiary of the programme. Consequently, the study assessed their satisfaction with the cash transferred to them rather than whether they receive the cash or not. This information is captured in Table 4.17 below.

Table 4.17: Respondents' Satisfaction with the Cash Transfer Programmes

Satisfaction Level	Frequency	Percent
Satisfied	289	76.1%
Neither Satisfied nor Dissatisfied	45	11.8%
Dissatisfied	46	12.1%
Total	**380**	**100.0%**

Source: Field Data, (2021)

Table 4.17 above shows that the majority of the respondents (76.1%) were satisfied with the OPCT. This implies that most the elderly person appreciate the cash that they receive from the programme and that they feel that this money is making a difference in their lives. In response to a follow-up question, respondents gave several reasons for their satisfaction with the cash-transfer. Some of them said that the cash has helped them to buy foods and other necessities, others say that they use the money to purchase medication while others shared that the money helps them to pay for their rent. Respondent12, a 79 year old was grateful that the money helps her to purchase diabetes medication;

> *"I use this money to buy medicine for diabetes, which have become very expensive. I don't know how I would be getting this medicine if I was not getting the money." (Respondent12, Female, 2021)*

About 11.8% of the respondents were indifferent meaning that they were not satisfied but neither were they dissatisfied with the cash from the OPCT. These respondents probably feel that the cash they receive is little but appreciate having it rather than having nothing at all. Another 12.1% of the respondents said that they were dissatisfied with the programme. In the follow-up question, the main reason that these respondents gave for their dissatisfaction was that they felt that the money they were given was not enough to cover their needs. They

expressed their wish to have the amount increased in order to have an impact on their livelihood. Below are excerpts of what some of the respondents had to say:

> *"Life has become so expensive; the Kshs 2,000 that we get cannot even buy half of the things that I need in a given month. The government should increase this money." (Respondent47, Female, 2021).*

> *The program is good but the money is very little. I just use it to buy food but even the food cannot last till the end of the month. The amount should be increased." (Respondent189, Male, 2021)*

These finding is consistent with the results of a satisfaction survey conducted by the Republic of Kenya (2016), which found that most of the beneficiaries of the government cash transfers programmes were satisfied and over 90% reported that cash transfer had an impact on their lives. In the survey, 88% of OPCT beneficiaries reported that the cash transferred to them had a positive impact on the health of the household. In order to establish whether this is the case among elderly person living in the informal settlements in Nakuru town, the data on respondents' satisfaction with cash transfer was cross-tabulated with the data on access to health care. Table 4.18 below is a graphic presentation of the findings.

Table 4.18: Cross-Tabulation of Cash Transfer and Access to Health Care

		Access to Health Care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Satisfaction with old person's cash transfer	Satisfied	191 (66.1)	98 (33.9)	289 (100)
	Neither	31 (68.9)	14 (31.1)	45 (100)
	Dissatisfied	45 (97.8)	1 (2.2)	46 (100)

Pearson Chi-square (X^2 = 19.175, df=2, p=.000)

Source: Field Data, (2021)

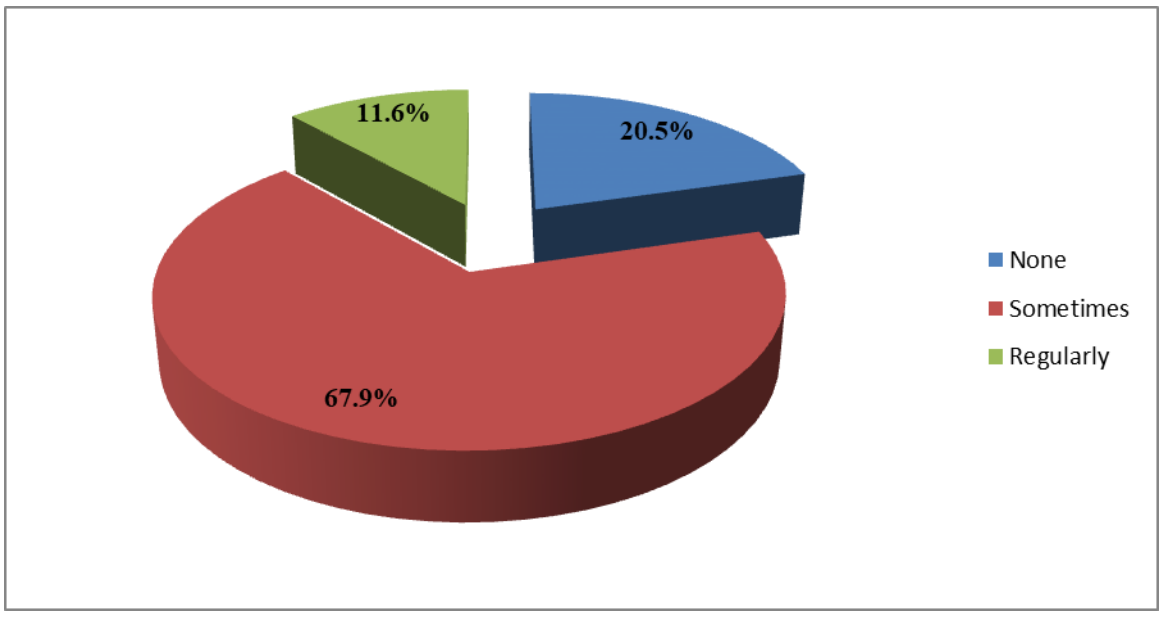
Table 4.18 above shows that the category of respondents who reported being satisfied with the cash transfer programme had the highest proportion of the elderly with high access to health care (33.9%) followed by those in the "Neither" category (31.1%). This proportion drastically falls to 2.2% in the category of respondents who feel dissatisfied with the cash transfer programme. These findings imply that elements that shape satisfaction of the elderly with the cash transfer programme have an influence on their accessibility to health care. The chi-square test showed that this influence is statistically significant (X^2= 19.175, df= 2,

p=.000). These findings are congruent with the survey conducted by the Republic of Kenya (2016), which showed that one of the impact of cash transfer programmes is that it has improved access to health care of the vulnerable populations.

4.6.2 Government Intervention and Access to Health Care

The second component of social protection that the study assessed was government interventions in the provision of health care to the elderly. The government of Kenya has several health related interventions that target older persons. One such intervention is the health insurance subsidy programme (HISP) that provide medical cover for elderly persons and other vulnerable groups who meet eligibility criteria (Kabia et al., 2019). The government funds the programme by ensuring that the beneficiary gets a medical cover without paying premiums. Another intervention is the free tuberculosis treatment policy. Although this policy applies to Kenyans of all age, Enos et al. (2018) found that prevalence of TB in the elderly population was still high at 576 positive cases per 100,000 persons. Consequently, free treatment is bound to benefit the elderly population alongside other Kenyans. In order to assess this factor, respondents were asked to indicate the number of government interventions on health that they have accessed. Figure 4.8 below is a graphic presentation of the findings.

Figure 4.8: Times that the Respondent has benefitted from Government Interventions



Source: Field Data, (2021)

Figure 4.8 above illustrates that the majority of the respondents (67.9%) benefits from government health interventions sometimes when they are in need of health care services. This means that most of the time, these respondents finance their health care needs but occasionally benefit from government interventions. On the other hand, 20.5% of the respondents said that they have not benefitted from any government intervention. This means that these respondents mostly rely on their own means whenever they need healthcare services. About 11.6% of the respondents reported that they benefit from the government interventions regularly. This means that these respondents access the government intervention most of the times that they seek medical care.

Several factors could explain the difference in access to government intervention. One of the factor is difference in awareness. Elders who are aware of the existence of government interventions such as the HISP and the process of enrolling are more likely to benefit from them. Another factor is the health condition of the elders. Some of the government intervention are specific to certain diseases and; therefore, they are bound to benefit elders who suffer from these diseases. For instance, the free TB treatment policy can only benefit elders who contact this disease. Elders suffering from other ailments that the government does not finance may need to finance themselves. The data on frequency of use of government interventions was cross-tabulated with data on access to health care to detemine whether there is an association between these two variables. Table 4.19 below ia a graphic respresentation of the results.

Table 4.19: Cross-Tabulation of Government Intervention and Access to Health Care

		Access to Health Care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Does the government to intervene for the elderly	None	67 (85.9)	11 (14.1)	78 (100)
	Sometimes	182 (71.9)	71 (28.1)	253 (100)
	Regularly	13 (29.5)	31 (70.5)	44 (100)
Pearson Chi-square (X^2 = 38.627, df=2, p=.000)				

Source: Field Data, (2021)

Table 4.19 above shows that the category of respondents that has benefitted from government intervention regularly has the highest proportion of elders with high access to health care

(70.5%). This proportions drastically decline to 28.1% in the category of respondents who reported that they benefit from government interventions sometimes. The proportion declines further to 14.1% in the category of elders who do not benefit from any government intervention. These findings suggest that there is a positive association between getting into government health interventions and access to healthcare services by eldery persons. The chi-square test showed that this association is at the 0.01 level of significance (X^2= 38.627, df=2, p= <.001). These findings are consistent with the study by Kabia et al. (2019), who found that the HISP had improved access to health services for the poor.

4.6.3 Retirement Schemes and Access to Health Care

The final component of social protection that was analysed was retirement schemes. These are programmes that provide financial support to individual during retirement. In Kenya, there is one public retirement scheme known as the National Hospital Insurance Fund (NHIF). There are also numerous private retirement schemes mainly run by Insurance Companies that people can join either through their employer or independently. The study sought to establish the penetration of retirement scheme on the elderly population living in the informal settlement in Nakuru town. Respondents were asked to indicate whether they are members of any retirement scheme. Figure 4.9 below summarizes the findings.

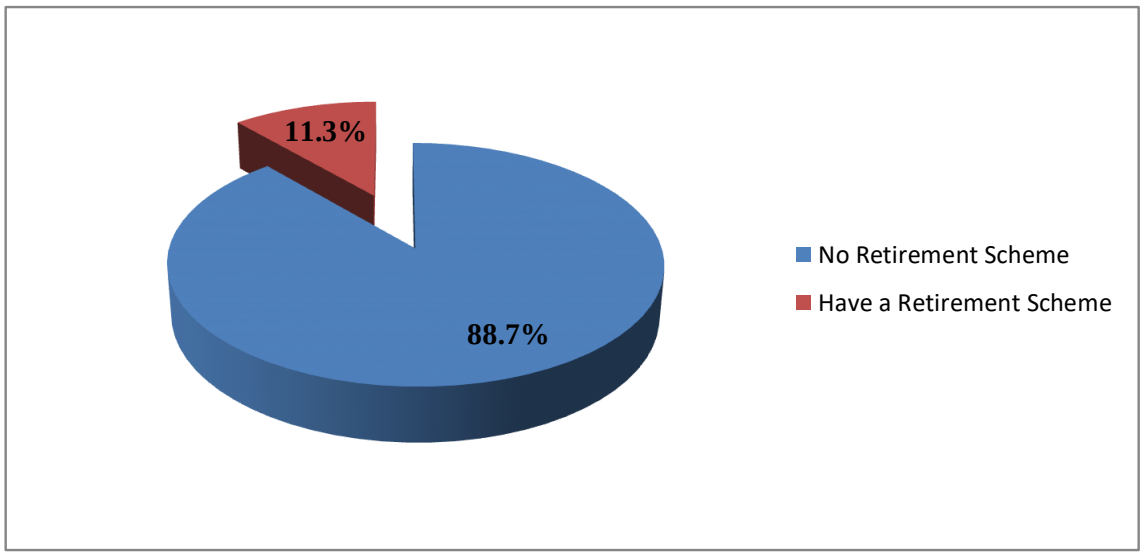


Figure 4.9: Distribution of Respondents by Membership of Retirement Scheme

Source: Field Data, (2021)

Figure 4.9 above shows that the majority of the respondents (88.7%) were not members of any retirement schemes and; therefore, were not receiving any retirement benefits, while

11.3% had retirement scheme benefits. These findings indicate that there is low penetration of retirement schemes among the elderly population living in the informal settlement. The findings are consistent with the study by Onduko et al. (2015), who found the penetration of retirement benefit schemes was low with 15% of the elderly population enjoying retirement benefits. Current findings suggest that elderly persons living in the informal settlement are less likely to have retirement benefit than elderly person in the general population. In a follow-up open-ended question, respondents who had no retirement benefits were requested to give some of the reasons that prevented them from enrolment into a retirement benefit scheme in their working years. The overarching theme was that most respondents believed that these benefit schemes are only available for those in formal employment. This finding highlights an awareness deficiency concerning the retirement benefits schemes among informal settlement dwellers most of whom work in the informal sector. It is probable that most of the residents in the informal settlement are not aware that they can join and contribute towards retirement benefits scheme independently. To establish whether there is a connection between having retirement benefits and accessing health care, this data was cross-tabulated with data on access to health care. Table 4.20 below presents the findings.

Table 4.20: Cross Tabulation of Retirement Scheme and Access to Health Care

		Access to Health Care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Are you a member of any retirement benefit scheme	No	266 (78.9)	71 (21.1)	337 (100)
	Yes	1 (2.3)	42 (97.7)	43 (100)

Pearson Chi-square (X^2 = 27.436, df=1, p=.000)

Source: Field Data (2020)

Table 4.20 above shows that the category of respondents that have retirement benefits had a substantially higher proportion of individuals with high access to health (97.7%) than the category of respondents who did not have retirement benefits (21.1%). These findings suggest that having retirement benefits has a positive influence on access to health by elderly persons living in the informal settlements. The chi-square tests confirms that this influence is at the 0.01 level of significance (X^2= 27.436, df= 1, p<.001). This finding is in agreement with Onduko et al. (2015), who found that the low penetration of retirement benefit schemes in Kenya has a detrimental impact on the well-being of senior citizens including their ability

to access health care services. They further noted that the elderly's access to health care services is also curtailed by the low saving culture with most Kenyans retiring with less than 20% of their total income before retirement.

4.7 Transportation System and Access to Health Care

The final objective of the study was to assess the influence of transportation system on access to health care services by elderly persons living in the informal settlements in Nakuru town. This objective was founded on the premise that access to transportation services not only assists elderly persons to travel to health care facility but also enable them to procure goods that are vital to their health. According to Kerschner and Silversten (2017), transportation is a need, a want, and a challenge to senior citizens because it cuts across a variety of critical issues related to healthy aging. Three aspects related to this factor were examined namely: cost of transport, availability of transportation programmes, and mode of transportation.

4.7.1 Cost of Transport and Access to Health Care

The study sought to determine the cost that the elderly persons in the informal settlement in Nakuru incur when they travel to their preferred health care facilities. Respondents were asked about this issue and their responses are captured in Figure 4.10 below.

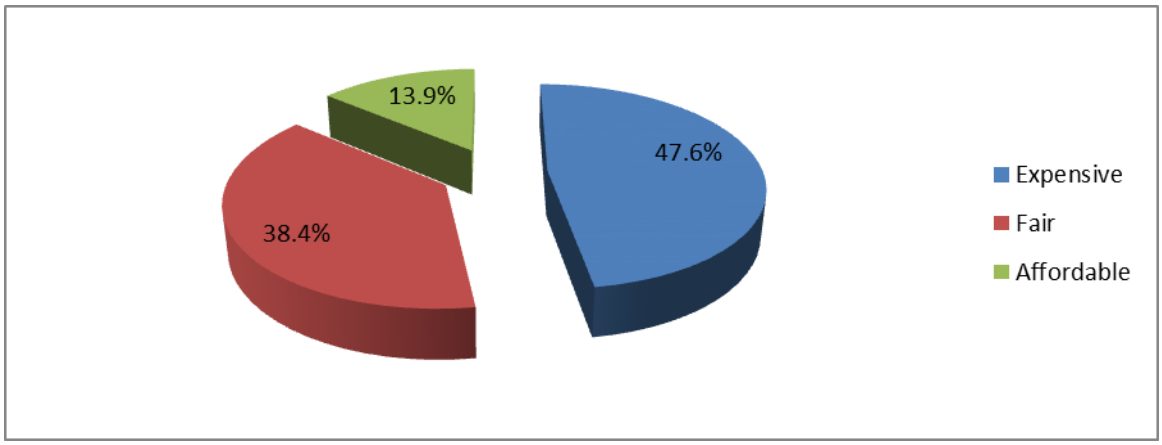


Figure 4.10: Cost of Transport to Preferred Health Care Facility

Source: Field Data, (2021)

Figure 4.10 above illustrates that the largest section of the respondents (47.6%) felt that the cost that they incur to travel to their preferred health care facility was expensive. This implies that these respondents feel that the cost of transport exceeds what they would be comfortable spending on transport. These findings are consistent with the study by Escamilla et al. (2019),

who found that despite having improved transport network, the cost of transportation is a major burden. The study found that many residents of the informal settlement walk to health centres because they cannot afford the available means of transport. However, current findings show that quite a substantial segment of the respondent (38.4%) felt that the cost of transport was fair while 13.9% described the cost as affordable.

These findings are consistent with those of Salon and Gulyani (2019), who found that public service vehicles popularly known as matatus provide a relatively cheap mode of transport in most urban areas in Kenya. These means of transport has made transportation services relatively affordable to residents. It should be noted that cost of transport is determined by the availability of different means of transport. Cost is likely to be lower where matatu services are easily accessible. Cost of transport is also determined by the condition of an individual particularly their physical condition. For instance, mobility problems may limit an individual's ability to utilise matatus compelling him or her to hire a taxi or "tuk tuk", which are more expensive. On the contrary, those who are in good physical conditions have the capability of even walking to a nearest health care facility. Cross-tabulation was done in order to determine the influence of cost of transport on access to health care. Results are presented in Table 4.21 below.

Table 4.21: Cross-Tabulation of Cost of Transport and Access to Health Care

		Access to Health Care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
How would you describe the cost of transport to your preferred health centre	Expensive	167 (92.3)	14 (7.7)	181 (100)
	Fair	100 (68.5)	46 (31.5)	146 (100)
	Affordable	0 (0.0)	53 (100.0)	53 (100)

Pearson Chi-square (X^2 = 38.627, df=2, p=.000)

Source: Field Data, (2021)

Table 4.21 above shows that all respondents (100%) in the "affordable" category had high access to health care. On the other hand, about 31.5% of respondents in the "fair" category had high access to health care with this proportion declining to 7.7% in the category of respondents who felt that the cost of transport was expensive. These findings indicate that the affordability of transport to preferred health care facilities has a positive influence on access

to health care services by elderly persons living in informal settlements in Nakuru. The chi-square test shows that this influence is at the 0.01 level of significance (X^2= 38.627, df=2, p<.001). These findings are consistent with the study by Kabia et al. (2019), who found that the high cost of transport is a major barrier to access to health care services among the poor in Kenya.

4.7.2 Transportation Programme and Access to Health Care

The study also sought to establish whether there are programmes that have been established to provide transportation services to the elderly population. For instance, Kerschner and Silversten (2017) found that in the United States, there are some health care facilities that have initiative programme aimed at providing transportation service for senior citizens who require regular care such as physical therapy, dialysis, or diabetes management. Wong et al. (2018) also observed that some cities around that globe were providing public transport concession fare programmes to support the transportation of the elderly. The current study sought determines whether such programmes were available to the elderly population living in Nakuru town. Respondents were asked to indicate whether they are aware of any programme that provides transport services to the elderly in their areas. Their views are captured in Figure 4.11 below.

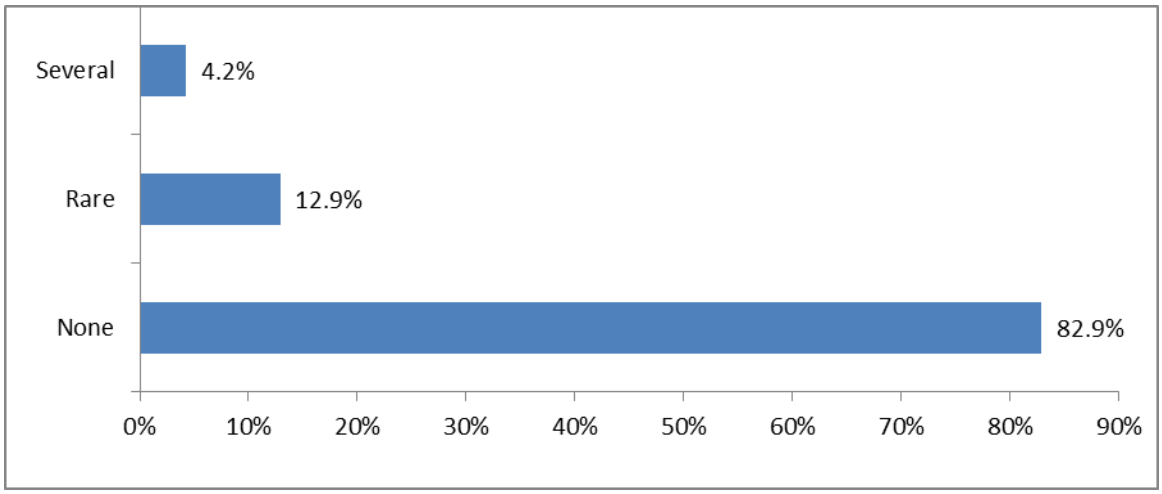


Figure 4.11: Transportation Programmes that Assist the Elderly

Source: Field Data, (2021)

Figure 4.11 above illustrates that the majority of the respondents (82.9%) were not aware of any programme that provide transportation assistance to elderly persons. About 12.9% reported were of the view that the programmes were rare. Only 4.2% said that they were aware of existence of several programmes. These findings are consistent with the study by Gorman et al. (2019), who found that there is a major policy gap in the low-and middle

income countries regarding the transport use and mobility of older people. In a follow-up, open-ended question, those who said that they were aware of several programmes were asked to list them. The name of three organisations that provide these services were: The Kenya Council of Imams and Ulamaa- Rift Valley Branch, Rafa Disability & Elderly Care Center, and Help Age International. This qualitative data confirms that the transport programmes actually exist, but there is low level of awareness about their existence. Cross-tabulation was used to assess whether there is a relationship between the existence of these programmes and access to health care by the older adults. Table 4.22 below presents the findings.

Table 4.22: Cross-Tabulation of Transportation Programme and Access to Health Care

		Access to Health Care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
Is there any programme that assist the elderly with transportation	None	203 (64.4)	112 (35.6)	315 (100)
	Rare	21 (42.9)	28 (57.1)	49 (100)
	Several	0 (0.0)	16 (100.0)	16 (100)

Pearson Chi-square (X^2 = 29.865, df=2, p=.000)

Source: Field Data, (2021)

Table 4.22 above illustrates that all respondents (100%) in the category of the elderly who are aware of several transportation programmes had high access to health care services. In the category of respondents who said that the programmes were rare, 57.1% had high access to health care services while in the category of elderly who were not aware of any programme, about 35.6% had high access to health care services. These findings show that access to transport programmes for the elderly has a statistically significant influence on access to health care services by elderly persons living in the informal settlement in Nakuru town. These findings are consistent with the study by Lee et al. (2018), who found that investment in community transport programmes has the potential of positively affecting the lives of older people.

4.7.3 Mode of Transport and Access to Health Care

The final transportation issue that the study assessed was the mode of transport used by the elderly to access health care facilities. The survey prompted respondents to provide this information using a multiple choice question. Table 4.23 below presents the findings:

Table 4.23: Distribution of Respondents by Mode of Transport

Mode	Frequency	Percent
Public	238	62.6%
Private	20	5.3%
Walking	122	32.1%
Total	**380**	**100.0%**

Source: Field Data, (2021)

Table 4.23 above shows that the majority of the respondents (62.6%) rely on public transport means to get to their preferred health care facility. There are various means of public transport available to residents of Nakuru town including matatus, “boda boda”, “tuk tuk”, and taxis. Matatu are the most popular means of transport but the use of boda bodas is also on the rise (Salon & Gulyani, 2019). This author found that between 37% and 48% of residents of Nakuru and other major towns rely on motorised public transportation with matatu accounting for 88% of all motorised transport. Current findings suggest that the proportion is much higher among residents living in the informal settlement.

About 32.1% of the respondents reported that they usually walk to their preferred health care facility. These are respondents who prefer to walk probably because the distance to their preferred health care facility is short or they find the cost of the available means of transport prohibitive. However, Escamilla et al. (2019) observed that a good number of residents of the informal settlements in Kenya walk because they cannot afford mortorised means of transport. These authors also noted that informal settlements are characterised by poor road networks that impede public service vehicles from entering. Consequently, residents are compelled to walk outside the settlement. These earlier findings imply that the most probable reason for walking by the elderly in informal settlement in Nakuru is the prohibitive cost of motorised transport rather than proximity of health care facilities.

About 5.3% of the respondents reported that they often used private means to get their preferred health care facility. Private transportation mainly entail the use of vehicles that are

not registered for use in commercial ferrying of passangers such personal or company cars. These findings suggest that use of private transport by the elderly in the informal settlement is limited. The findings are consistent with Salon and Gulyani (2019), who found that the use of personal cars in highly limited with Nairobi recording a highest usage of 7%. This implies that other towns such as Nakuru have less than 7% of their population using personal car. The study further noted that a personal care have unique characteristics such as high socio-economic status and; therefore, are less likely to be found in the informal settlements. Cross-tabulation was done to establish the influence of means of transport on health care access. Table 4.24 below presents the results.

Table 4.24: Cross-Tabulation of Means of Transport and Access to Health Care

		Access to Health Care Category		
		Low Access N (%)	High Access N (%)	**Total N (%)**
What means of Transport do you use	Public	149 (62.6)	89 (37.4)	238 (100)
	Private	3 (15.0)	17 (85.0)	20 (100)
	Walking	115 (94.3)	7 (5.7)	122 (100)

Pearson Chi-square (X^2 = 87.223, df=2, p=.000)

Source: Field Data, (2021)

Table 4.24 above shows that the proportion of the elderly with high access to health care was highest in the category of respondents who use private transport (85%). This proportion declines to 37.4% in the category of respondents who rely on public transport and declines further to 5.7% in the category of respondents who walk to the health care facility. The chi-square test showed that the difference in these proportions is statistically significant at the 0.01 level of significance (X^2= 87.223, df=2, p<.001). These results indicate that the mode of transport has a significant influence on access to health care with individual who rely on private transport being more likely to have high access to health care. This finding is consistent with the study by Salon and Gulyani (2019), who noted that an individual who uses personal/private transport in Kenya differ from the general population in terms of the socio-economic status. This implies that the elderly that rely on private means of transport have higher socio-economic status than the average elderly person in the informal settlement. The socio-economic condition could thus explain the high access to health care.

4.8 Chapter Summary

This chapter has discussed the procedures that were used in the analysis of data as well as presented and interpreted the findings. The findings suggest that the majority of the elderly (70.3%) had low access to health care services. In addition, access to health care is positively influenced by the assistance that the elders get from the family and the relationship with the family. Cultural elements that have a significant influence of health access of the elderly were beliefs in traditional medicine and taboos on health issues. Social protection programmes including cash transfers, government interventions in health, and retirement schemes have a positive influence on health care access while cost of transport has a negative impact.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarises the results of the study, draws conclusions based on the conceptual framework and make recommendations of the research study.

5.2. Summary of the Findings

This study was carried out in informal settlements such as Kivumbini, Kaptembwa, Rhoda, Lake View, Flamingo, Kaloleni and Bondeni in Nakuru Town that is both Nakuru West and East Sub-County, Kenya. The main aim of the study was to investigate on factors influencing access of health care among elderly. Respondents' ages ranged from 70 and over 94 years, most had no formal education while majority were separated, widowed or divorced from partners. Findings showed that 70.3% of these respondents had low access to health care services.

5.2.1 Family Support and Access to Health Care

The study had the assumption that family support is one of the factors that influence access to health care services by the elderly in the study area. Three elements related to family support were examined namely: household companion, material assistance, and relations with family. Results showed that the majority of the respondents were living with the extended family, but the person they were living with has no significant influence on health care access. Instead, findings showed that it is the assistance that the elderly get from the family and their relationship with family members that has a significant influence on health care access. Those who received regular assistance from family members and those who related very well with family members were likely to have high access to health care services than with their counterparts.

5.2.2 Cultural Beliefs and Access to Health Care

The study also theorised that the elderly's access to health care services was shaped by cultural beliefs. Three cultural issues were examined namely: religion, belief in traditional medicine, and taboos related to health care. Results showed that the majority of the respondents were Christian (65%) while the Muslim were (25%) of the sample. However, religious background did not have a significant influence on access to health care. On the

other hand, beliefs on traditional medicine and taboos related to health had a significant influence. Results showed that respondents who believed in the use of traditional medicine most of the time and those who had many taboos related to health care were likely to have low access to health care services than their counterparts.

5.2.3 Social Protection and Access to Health Care

The study had further assumed that access to health care by elderly persons in the informal settlement could be influenced by social protection. The influence of three forms of social protection was interrogated namely: cash transfers, government intervention in health care, and retirement schemes. The study established that the majority of the respondents were satisfied with the cash transfer programme and that the level of satisfaction has a positive influence on access to health care. However, the majority of the respondents reported that they access government health care intervention only from time to time and that they do not have retirement benefits. Results showed that accessing government health intervention programmes and having retirement benefit schemes has a positive influence on access to health care service by the elderly living in the informal settlement.

5.2.4 Transportation System and Access to Health Care

Lastly, the study had assumed that access to health care by the elderly in the informal settlement could also be influenced by the transportation system. Three factors related to transportation were interrogated namely: cost of transport, transportation programmes, and mode of transport. Results showed that most of the respondents shared that cost of transport to their preferred health care facility was expensive and that this had a negative influence on access to health care. Results further showed that the majority of the respondents were not aware of any programme that was providing transportation assistance to the elderly. The lack of awareness about the existence of the programmes bars them from accessing these programmes and this has a negative influence on health care access. The majority of the respondents utilise the public means of transport to access health care services. Mode of transport had a significant influence on access to health care with those with access to private mode of transport being more likely to have high access to service followed by those who can get public transport.

5.3 Conclusion

According to the findings, the study concludes that most elderly persons residing in the informal settlement have low access to health care. Access to health care is influenced by the

assistance that they get from family members with only a few elderly persons getting this kind of assistance on a regular basis. Access to health care is also influenced by family relations with the majority of the elderly having fair relationships with their kin.

Also that access to health care services by the elderly persons in the informal settlement is influenced by cultural beliefs. In particular, this access is shaped by the elderly's beliefs in traditional medicine with those who rely on these medication most of the time, exhibiting low access to health care. Access to health is also influenced by taboos on health particularly the belief that some illness are caused by breaking of cultural traditions.

Further, that access to health care services by the elderly persons in the informal settlement scheme is shaped by the social protection programs. Specific social protection programmes that have an impact on access to health care include cash transfer, government intervention in health care, and retirement benefits schemes. Most of the respondents are satisfied with cash transfer but only access government interventions from time to time and have no retirement benefits.

Lastly, that transportation has an influence on access to health care by the elderly persons living in the informal settlements. Specific transportation factors that have a significant influence on health care access include cost of transport, access to transportation programme and mode of transport used by the elderly to get to their preferred health care facility. Most of the respondents shared that the cost of transport is expensive and do not have access to any transportation programme.

5.4 Recommendations of the Study

Based on the findings, the study recommends that the government at all levels (Policy-makers, Ministry of Health and County Government) should roll out awareness campaigns aimed at educating families on the need to support their elderly kin. They should also consider formulating a law that confer duty of care to children of elderly parents who suffer from health conditions such as dementia.

Policy-makers in the Health sector should also create a policy framework that seeks to regulate traditional medicine and integrate it into conventional health care. The framework should promote a complementary relationship between traditional medicine and modern medicine rather than an adversarial role. It should promote traditional medicine as being

complementary to modern medicine so as to eliminate the negative effect of traditional medicine on the elderly's health seeking behaviours.

Policy-makers particularly (Ministry of Health, County Government, public hospitals and the National Health Insurance Scheme) should also improve the availability of drugs, medications cover in accessing limited drug due to unavailability. Consequently, some adults are compelled to turn to traditional medicine because they cannot afford to purchase modern medicine.

Social workers serving among the elderly population should also roll out education campaigns aimed at eliminating taboos that hamper access to health care. In particular, the campaign should focus on educating the elderly regarding the cause of some of the diseases that they suffer from so as to end the belief that their illness are caused by spiritual factors.

Regarding social protection, the study recommends that policy makers engaged in especially safeguarding of the vulnerable adult should roll-out awareness campaign that seek to sensitise the elderly population regarding existing government intervention such as the Health Insurance Subsidy Programme (HISP) programme in order to increase the uptake. This is due to the fact that the findings showed that some elderly persons are not aware of these programmes.

Policy-makers in the Education sector should also roll-out programmes aimed at educating Kenyans regarding the importance of enrolling to retirement benefit schemes and saving for old age. Current findings show that the majority of the elderly persons in the informal settlement do not have retirement benefits. This leaves them exposed to financial shocks since they have limited ability to earn a living.

Regarding transportation system, the study recommends that the non-government organisation providing existing transportation programmes should create awareness regarding the existence of these programmes. Current findings suggest that few elderly persons are aware of these programmes.

Policy-makers in the transport sector should also roll-out public programmes aimed at providing transportation especially to elderly persons that suffer from illness that hamper their mobility. The programme should facilitate movement of these individuals to their preferred health care facility.

5.5 Recommendation for Further Studies

The study was confined to elderly persons living in informal settlement in Nakuru town. This may limit the generalization of the findings to other areas that do not share similar characteristics as Nakuru town. Future studies should replicate this research in other regions particularly the rural areas.

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APPENDICES

Appendix I: Letter of Introduction

Dear respondent,

My name is Jackqueline kiptui, a Masters of Development studies student at St Paul's University. The data that I will be collecting is for academic purposes only and will be carried out following the guidelines of the University. The purpose of this research is to identify factors influencing access to health care among elderly persons aged 70 years and above in the urban informal settlements such as Kivumbini, Kaptembwa, Rhoda, Lake View, Flamingo, Kaloleni and Bondeni, Nakuru Town, Kenya. The information given in the study will be confidential and privacy will be adhered. Participation will be voluntary with no payment. As a participant, you have the right to participate, decline or terminate the interview at any point during the interview session and you will not be victimised as a result.

Thank you,

Jackqueline kiptui,

0702-125-979.

Appendix II: Consent Form

Dear Respondent,

Please, this study is voluntary and there are no payments. If you choose to participate in this study, you are free to leave the study at any stage and there will be no victimisation for the decision you make.

I have read the letter of introduction and have understood clearly the information concerning my participation in the study. Confidentiality of all information I will provide is assured, while there will be no any kind of payment but voluntary. I will have the opportunity to ask questions where I am not clear and to my satisfaction. I also understand that I can decide to leave the study at any time and I will not be victimised for making such a decision.

Signature……..Date……

Appendix III: Survey Questionnaire

Instructions:

1. Do not write your name anywhere in this survey questionnaire.
2. The information you give will be for academic purposes and will remain confidential. Please respond to the questions below.
3. Circle where necessary corresponding to your answer and please note that any assistance from the researcher/research assistant is allowed.

SECTION A: DEMOGRAPHIC FACTORS	
1. What is your age?	70 - 75 years = 1 76 - 81 years = 2 82 - 87 years = 3 88 - 93 years = 4 Above 94 years = 5
2. What is your gender?	Male = 1 Female = 2 Others (Please indicate)……
3. What is your marital status?	Single = 1 Married = 2 Live with partner =3 Widowed/Divorced/ Separated = 4 Declines to answer.....999
4. What is your highest completed level of education?	No education = 1 Primary education = 2 Secondary education = 3 Tertiary education = 4 Others specify……. Declines to answer.....999
5. What kind of work do you mainly do?	Unemployed/housewife/houseman = 1 Agriculture = 2 Unskilled manual = 3 Skilled = 4

	business = 5 Clerical = 6 Professional technical / managerial = 7 Student = 8 Others ……
6. How many living children do you have?	……children
SECTION B: FAMILY SUPPORT	
7. Whom do you live with?	Alone = 1 My spouse = 2 My Children = 3 Extended family = 4 Others specify……
8. Do you receive any assistance from your family?	Regularly = 1 Sometimes = 2 None = 3
9. If you receive in any assistance, please mention the form of assistance.	……. …….. …….. ……..
10. How well do you relate with your family members?	Not well at all = 1 Fair = 2 Very well = 3
SECTION C: CULTURAL BELIEFS	
11. What is your religion?	Christian = 1 Muslim = 2 Hindus = 3 None = 4 Others (Please indicate)……..
12. Do you believe that traditional medicine can heal you?	Regularly = 1 Sometimes = 2 None =3

13. Are there any cultural taboos concerning health care issues?	None = 1 A Few = 2 Many = 3
14. If you know any taboos that exist, kindly name them.	…… …… ……
SECTION D : SOCIAL PROTECTION	
15. Are you satisfied with the old person's cash transfers?	Satisfied = 1 Neither satisfied nor dissatisfied = 2 Dissatisfied =3
16. Please elaborate on why you are satisfied or dissatisfied with the cash transfer.	…….. …….. ……..
17. How many times have you received free or subsidies treatment through government programmes?	Regularly = 1 Sometimes = 2 None = 3
18. Are you a member of any retirement benefit scheme?	No= 1 Yes = 2
19. If you do not have any retirement benefit, please share some of reasons that prevented you from enrolling in one?	…… …….. ……
SECTION E: TRANSPORTATION SYSTEM	
20. What means of transport do you use?	Public = 1 Private = 2 Walking = 3
21. How would you describe the cost of transport to your preferred health care facility?	Expensive = 1 Fair = 2 Affordable = 3

22. How many programmes that assist the elderly people to cater for their transportation are available in your area?	None = 1 Several = 2 Many = 3
23. If you are aware of any transport programme for the elderly, please list them.	……. ,…… ……..
SECTION F: ACCESS TO HEALTH CARE AMONG ELDERLY PERSONS	
24. How far is the nearest public health facility from your home?	More than 4 kilometers = 1 3 to 4 kilometers = 2 1 to 2 kilometers = 3 Less than 1 kilometer = 4
25. In the last 3 months how often have you been in need of healthcare services but unable to visit a health facility due to lack of transport?	On a Daily basis = 1 On a Weekly basis = 2 On a Monthly basis = 3 None at all = 4
26. In the last 3 months, when you visited a public health facility how frequent did you find special services for the elderly people?	Regularly = 1 Sometimes = 2 None = 3
27. In the last 3 months how frequent have you been sick but unable to seek help due to financial problems?	On a Daily basis = 1 On a Weekly basis = 2 On a Monthly basis = 3 None at all = 4
28. On a scale of 1-5 how would you rate the length of time that you had with the health care provider?	Very poor = 1 Poor = 2 Okay = 3 Good = 4 Very good = 5

THANK YOU FOR YOUR COOPERATION

OFFICE OF THE PRESIDENT
Ministry of Interior and Coordination of National Government

Email: ccnakurucounty@yahoo.com
ccnakurucounty@gmail.com

COUNTY COMMISSIONER
NAKURU COUNTY
P.O. BOX 81
NAKURU

When replying please quote:

Ref No. CC. SR. EDU 12/1/2/VOL.VI/67

22nd March, 2021

Deputy County Commissioner
- Nakuru East
- Nakuru West

RE: RESEARCH AUTHORIZATION – JACKQUELINE JEPNGETICH KIPTUI

The above named from St Paul's University has been authorized to carry out research **factors influencing access to health care among elderly persons in informal settlement** in Nakuru East and West Sub Counties in Nakuru County for a period ending 18th March, 2022.

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

MWANGI NYAGA
FOR: COUNTY COMMISSIONER
NAKURU COUNTY

MINISTRY OF EDUCATION

STATE DEPARTMENT OF EARLY LEARNING OF BASIC EDUCATION

Telegrams: "**EDUCATION**",
Telephone: **051-2216917**
When replying please quote
Email:cdenakurucounty@gmail.com

COUNTY DIRECTOR OF EDUCATION
NAKURU COUNTY
P. O. BOX 259,
NAKURU.

Ref. CDE/NKU/GEN/4/1/21 VOL.II/78

22nd March, 2021

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION – JACKQULINE JEPNGETICH KIPTUI
PERMIT NO. NACOSTI/P/21/9609

Reference is made to letter NACOSTI/ P/21/9609 dated 18th March, 2021.

Authority is hereby granted to the above named to carry out research in Nakuru County, Kenya on the topic: "***FACTORS INFLUENCING ACCESS TO HEALTH CARE AMONG ELDERLY PERSONS IN INFORMAL SETTLEMENTS IN NAKURU TOWN, KENYA*** "for the period ending ***18/03/22.***

Kindly accord her the necessary assistance.

For COUNTY DIRECTOR OF EDUCATION
NAKURU COUNTY

Ruth Kamau
For: COUNTY DIRECTOR OF EDUCATION
NAKURU

Copy to:

- St. Paul University

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR
SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **793175**

Date of Issue: **18/March/2021**

RESEARCH LICENSE



This is to Certify that Miss.. JACKQUELINE JEPNGETICH KIPTUI of St. Paul's University, has been licensed to conduct research in Nakuru on the topic: FACTORS INFLUENCING ACCESS TO HEALTH CARE AMONG ELDERLY PERSONS IN INFORMAL SETTLEMENTS IN NAKURU TOWN, KENYA. for the period ending : 18/March/2022.

License No: **NACOSTI/P/21/9609**

793175

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR
SCIENCE,TECHNOLOGY &
INNOVATION

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