

**UNIVERSITY OF GHANA**

**FINANCIAL SOURCES AND HEALTH SEEKING BEHAVIOUR  
AMONG THE ELDERLY IN GHANA**

**UNIVERSITY OF GHANA - LEGON**



**BY**

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THE AWARD OF A MASTER OF PUBLIC HEALTH DEGREE**

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**DECLARATION**

I, Patricia Ohenewaa Akuffo-Henaku, a Master of Public Health student of the University of Ghana, School of Public Health do hereby declare that this thesis is the product of my own original research. I further declare that this piece of research or a part thereof has not been presented by anyone in this or any other University. All other works apart from my own that was used have been fully referenced and acknowledged.

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## **DEDICATION**

I dedicate this work to my grandparents- the late, Mr. Patrick Offei-Henaku, Madam Margaret Nancy Fynn, Mr. Ernest Emmanuel Adisi and Mrs. Victoria Akuffo-Adisi. This is also dedicated to my parents for their unflinching love, sacrifices and support.

## **ACKNOWLEDGEMENT**

In the course of pursuing this path, I have encountered people whom I owe debts of gratitude and appreciation. They were sources of inspiration, insight and direction.

I am profoundly grateful to God, the giver and sustainer of life. This work would not have been completed had it not been for His abundant mercies, grace and strength.

I would also like to express my deepest appreciation to my supervisor Dr. Ama Pokuaa Fenny for her relentless efforts to bring out the very best in me. Her encouragement, responsiveness, comments, instructions and intelligence were very vital in the completion of this thesis.

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Finally, I want to thank every person I ever encountered- in person or virtually. You all have a stake in this. God bless you.

**LIST OF ABBREVIATIONS**

LMICs	Low and Middle-Income Countries
NHIS	National Health Insurance Scheme
SAGE	Study on Global Ageing and Adult Health
SSNIT	Social Security and National Insurance Trust
UK	United Kingdom
WHO	World Health Organization

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## **ABSTRACT**

The elderly population is gradually expanding globally including Ghana. Ghana has a National Health Insurance Scheme which makes limited provisions for the elderly. In addition, the scheme has not gained wide coverage. The essence of this study was to explore the various sources of finance for the healthcare besides the National Health Insurance Scheme and investigate the implications it had on their healthcare consumption. This study used data from the World Health Organization's Study on Adult Health and Ageing (SAGE), Wave 2 for Ghana. A quantitative research design was employed in carrying out this study. The study found that age and other factors such as job sector employer, current working status, payment types, community and government support, current income of household members, insurance, borrowing from other financial institutions and additional benefits influence use of formal healthcare by the elderly ( $p < 0.05$ ). Based on the analysis of a representative individual and household survey, it is recommended that, post-retirement labour arrangements are implemented and a culture of saving for health is emphasized and promoted widely.

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## CHAPTER ONE

### INTRODUCTION

#### **1.0 Background to the Study**

The world's population is fast growing in terms of size, and age (United Nations, Department of Economic and Social Affairs, Population Division, 2015). The World Health Organization's assessment report on ageing and health indicates that in almost every country, the proportion of older people is increasing (World Health Organization, 2014). By 2050, around two billion people in the world will be aged 60 years and over, with 400 million aged 80 years and over. Of these older people, 80% will live in low- and middle-income countries (LMICs). This increase in population size has implications on various aspects of a country's life and this includes health in relation to the elderly.

At the last population and housing census in 2010, the elderly were reported to comprise 6.7% of the population (Ghana Statistical Service, 2013). This paints a picture of what the elderly population is currently. It also provides some insight into what the population is likely to be in at least the next five decades. Being aware of the implications of this is necessary as it informs government and citizens altogether, to plan towards old age and make sound decisions concerning old age. An elderly person is an adult who has reached an advanced age. The 2010 Population and Housing Census Report of Ghana, clearly defines the age of an elderly person to be 60 years and above. According to the WHO's Global Strategy and Action Plan on Ageing and Health, the Sustainable Development Goals has fifteen of its goals being relevant to the elderly (WHO, 2017). More particularly, Goal 3 which is aimed at ensuring healthy lives and promoting well-being for all at all ages by achieving universal health coverage cannot be overlooked in the discussion on the health-seeking behaviours of the elderly. This is because universal health coverage and ageing interact interdependently. A country's ability to achieve Universal Health Coverage reflects the elderly's attitudes towards seeking healthcare. Meanwhile, achieving Universal Health Coverage encompasses ensuring that healthcare

services are affordable and do not pose a financial risk to individuals. In 2005, the National Health Insurance Scheme was introduced to replace the cash and carry system (Ghana Ministry of Health, 2005). The aim of the scheme was to make healthcare more accessible and affordable for the Ghanaian population. In the National Health Insurance Act, provisions were made with the sole aim of making healthcare accessible by the poor and vulnerable in society. The elderly in Ghana, however, fall in both categories of poor and vulnerable.

According to the 2014 WHO Ghana country assessment report on ageing and health, although reliable income data are notoriously difficult to obtain in household health surveys, it is certain that older people in Ghana have access to fewer resources than they often require for daily life (World Health Organization, 2014). Consequently, many rely on monetary and non-monetary resources from their relatives, mostly from their immediate family. In turn, they also play a role in supporting others in the family and the community.

Moe et. al (2012) indicates that the World Health Organization admits that the aging process and problems related to the elderly should be properly investigated and understood in order for appropriate and effective interventions to be planned and implemented. These interventions would serve the evolved and specialized health demands of the elderly. It is important to note that the health seeking behaviour of any individual is influenced by certain predisposing, enabling and need factors. In agreement with Gary Becker's theory of "Allocation of Time", individuals spend time and resources on investments to improve health (Becker, 1965). This translates into the fact that as one's health depreciates, a demand for better health goes up and thus, calls for a supply of essential and specialized health services. This, is however, the case for the elderly in Ghana.

### **1.1 Problem Statement**

Although the National Health Insurance Act stipulates an exemption policy which is to cater for the elderly above 70 years, the reality is not the same. Due to poverty, this exempt group is

unable to register for the scheme thus, reducing coverage of the NHIS (Fenny, 2017). This failure of the National Health Insurance Scheme to cover certain expenses experienced by the elderly poor predisposes this population group to finding alternate means to cover health costs. Part of the problem is that, although the vulnerable in society are given very little attention, this attention is usually skewed towards women and children, rather than the elderly. This can be attributed to the misconception that elderly persons cannot contribute to the economic progress of society due to their frail nature and dependency status, especially in Ghana (Ayete-Nyampong, 2008; "Fact file: Misconceptions on ageing and health", n.d.). In addition, a lot of focus is channelled to the current statuses of individuals and thus, we fail to be futuristic and plan ahead for our old age. It is apparent in this case that Ghana's health system focuses on singular events instead of patterns that may lead to a future event (Adam, 2011). Literature on access to healthcare by the elderly have shown that financing is a major barrier (Neme, 2018; Lutala et. al, 2010; Pellet & Jusot, 2018; Adhikari & Rijal, 2015). In addition, literature on how various sources of finance influence the health-seeking behaviour of the elderly is very limited in the gerontological and health financing space. The problem escalates as an increase in the elderly population suggests a greater demand for food and welfare services such as healthcare. The rural areas, where a majority of Ghana's elderly reside, are noted for high levels of poverty (Ghana Statistical Service, 2013). This state of poverty could have implications such as renunciation of care or resort to other forms of healthcare services which may not address their health issues and lead to undesirable health outcomes.

## **1.2 Justification of Study**

In the quest to achieve universal health coverage for all and more specifically, healthy ageing for the elderly population, there is the need for attention from government, non-government agencies, health agencies particularly and individuals to be directed to issues surrounding the elderly.

Secondly, the gap in literature on how health-seeking behaviour among the elderly is influenced by the availability of funds and availability to various sources of funds is wide. This, however, calls for the need to conduct research such as this in order to fill the gaps in literature.

The essence of this study is also to bring to light the need to promote early ageing and pension plans among young people. In Ghana, it is very common to find people retiring without pension plans because of a failure on their part to make the necessary arrangements early.

Finally, this study will be important to the body of knowledge in public health, gerontology and other related disciplines because it would draw attention to the need for relevant professionals and practitioners to fashion models which would serve as supplementary economically engaging activities and by that, financing avenues for individuals and more specifically, the elderly in the event of illness.

### **1.3 OBJECTIVES**

#### **1.3.1 General Objective**

To determine how healthcare is financed by the elderly in Ghana in the event of illness and how this influences their health seeking behaviour.

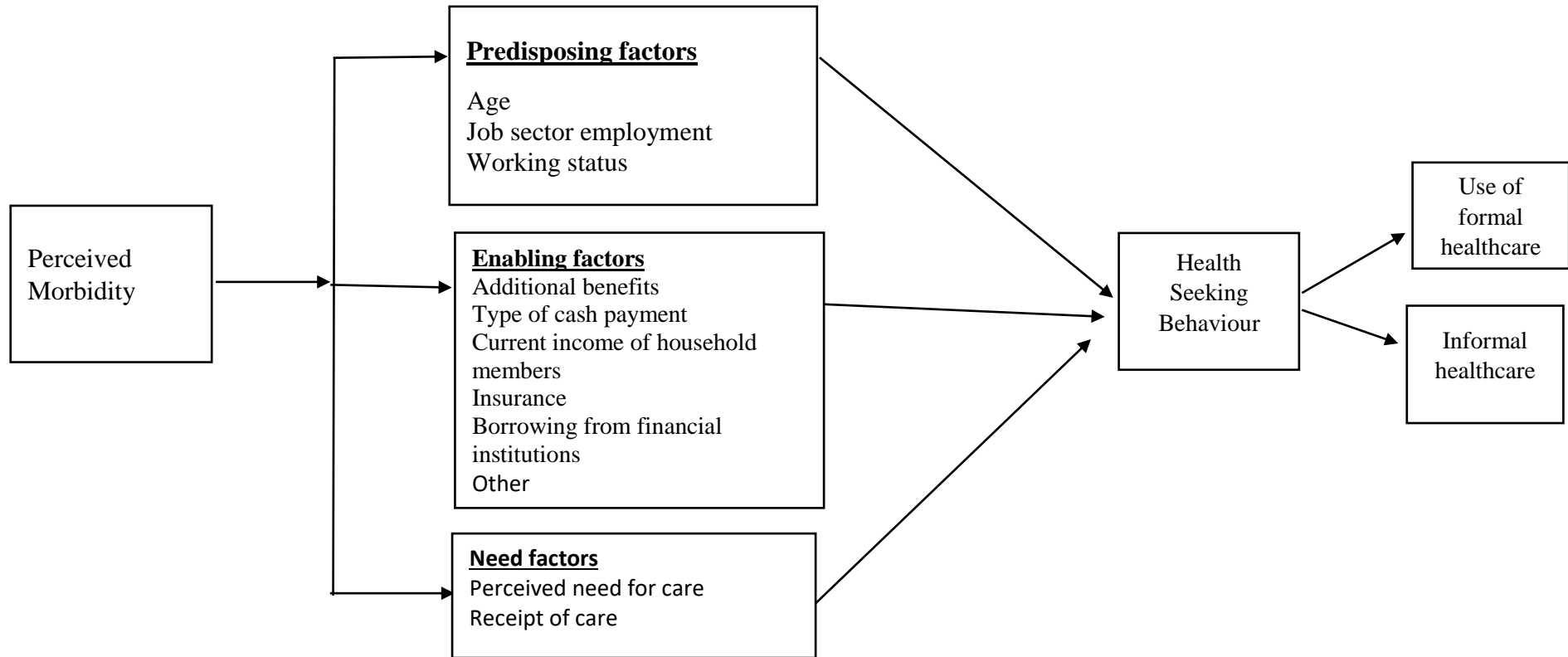
#### **1.3.2 Specific objectives**

1. To investigate the sources of finance of the elderly in the event of illness.
2. To determine health care options utilized by the elderly.
3. To ascertain factors that influence the utilisation of formal healthcare by the elderly.

#### **1.3.3 Research questions**

1. What are the sources of finance for the elderly in the event of illness?
2. What health care options are utilized by the elderly in Ghana?
3. What are the factors influencing utilisation of healthcare by the elderly in Ghana?

Figure 1.1 Conceptual Framework



Source: Author's computation based on the Andersen & Newman Framework of Health Utilization

The diagram above shows how the independent variables in this study (financing sources, health status, and proximity to the type of care, age, gender, family status, employment status and education influence the elderly’s use of formal healthcare in the event of illness. The use of health facilities can either be formal, which is, public or private hospitals or informal healthcare, being traditional herbalists or self-medication). This framework was adopted because it was found to be comprehensive and encapsulated all the intended variables for this study.

**Table 1.1 Operational definitions**

<b>VARIABLES</b>	<b>DEFINITION</b>
Financial sources	This refers to the various sources of income available to the elderly in the event of illness.
Individual-level sources of income	These are the personal sources of income.
Household-level sources of income	These are the household sources of income.
Health seeking behaviour	This refers to the elderly’s use of healthcare facilities when ill. It could be formal or informal.

### **1.5 Scope**

This chapter introduced the study by providing a background of evidence in the form of statistical projections and findings from literature. It touched on the problems the study sought to address and the essence of the study. The objectives of the study were to investigate the sources of finance for the elderly in the event of illness, to determine health care options utilized by the elderly and to ascertain factors that influence the use of formal healthcare by the elderly. In order to answer the questions this study posed, a conceptual framework, detailing the interaction of selected independent and dependent variables was adopted.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.0 Introduction

This chapter captures a detailed review of relevant literature in relation to the topic under study as well as theoretical frameworks that support the study.

#### 2.1 Theoretical Framework

The theoretical underpinning for this study is the Andersen and Newman Framework of Health Services Utilization. The purpose of this framework is to discover conditions that either facilitate or impede utilization (Aday & Andersen, 1974). The goal being, to develop a behavioural model that provides measures of access to medical care. The framework was first developed in the 1960s and has since gone through four phases. An individual's access to and use of health services is considered to be a function of three characteristics namely, predisposing factors, enabling factors and need factors (Ward, 1977).

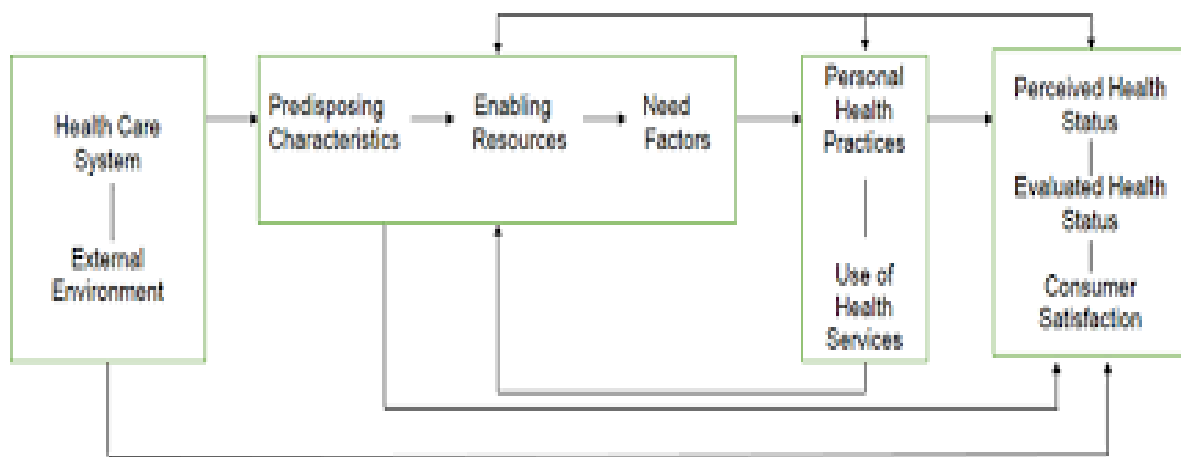
Predisposing factors cover the socio-cultural characteristics of individuals that exist prior to their illness, social structure (education, occupation, ethnicity, and culture), health beliefs (attitudes, values, and knowledge that people have concerning and towards the health care system) and demographics such as age and gender (Aday & Andersen, 1974; Anderson, 2005).

The enabling factors comprise the logistical aspects of obtaining care. These include personal/family (the means and know-how to access health services, income, health insurance, a regular source of care, travel, extent and quality of social relationships), community (available health personnel and facilities, and waiting time) and possible additions (genetic factors and psychological characteristics) (Bass, & Noelker, 1987; Aday & Andersen, 1974).

Finally, the need factors. These tend to be the most immediate cause of health service use, from functional and health problems that generate the need for health care services. According to Andersen (2005), perceived need will improve the understanding of care-seeking and

observance of a medical regimen. This is because, it represents how people view their own general health and functional state, as well as how they experience symptoms of illness, pain, and worries about their health and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help (Andersen, 2005).

Meanwhile, evaluated need is more closely related to the nature and degree of treatment that will be provided after a patient has presented to a medical care provider. This is evident in the professional judgment passed about people's health status and their need for medical care (Andersen, 1995).



Source: Andersen and Newman Framework of Health Services Utilization (2005)

The Health Belief Model was also developed in the early 1950s by social scientists at the U.S. Public Health Service (Anderson, 2005). The primary goal was to understand the failure of people to adopt disease prevention strategies or screening tests for the early detection of disease. Later, the model was employed to understand patients' responses to symptoms and compliance with medical treatments. The model proposes that a person's belief in a personal threat of a disease together with a confidence in the usefulness of the recommended health behavior or action will determine the prospect for the person to adopt the behavior.

This model draws from psychological and behavioral theory with the basis that the two aspects of health-related behavior are the desire to avoid illness, or on the other hand, recover if already ill; and the belief that a specific health action will avert or remedy illness. In due course, an individual's course of action often depends on the person's opinions of the merits and obstacles related to health behavior. There are six constructs of the model (Anderson,1995) . The first four constructs were developed as the original tenets. The last two were added as research about the model evolved. These tenets include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cue to action and self-efficacy. This model is criticized as being limited in terms of not accounting for a person's attitudes, beliefs or other factors that dictate a person's acceptance of a health behaviour (Anderson, 2005). Another weakness of this model is its assumption that every individual has access to equal amounts of information on the disease (Porter, 2000). It also does not capture environmental or economic factors that may impede or facilitate the recommended intervention.

Another behavioural theory is the theory of planned behaviour. This theory started as the theory of reasoned action in 1980 (LaMorte, 2019). It was meant to predict an individual's intention to engage in a behaviour at a specific time and place. The main intention was to explain all behaviours over which people have the ability to exert self-control. The key tenet in this model is behavioural intent (LaMorte, 2019). These intentions are influenced by the attitude about the likelihood that the behaviour will have the expected outcome and the subjective evaluation of the risks and benefits of that outcome. This theory states that behavioural achievement is subject to motivation/intention and ability/behavioural control. It distinguishes between three types of beliefs- behavioural, normative and control (LaMorte, 2019). The six main constructs underpinning this theory include, attitudes, behavioural intention, subjective norms, social norms, perceived power and perceived behavioural control. Some limitations of the theory cover the assumptions that behaviour is the end-product of a linear decision-making process,

and does not consider that it can change over time; the individual has access to resources and opportunities to be successful in performing the desired behaviour, despite the intention. Additionally, it does not account for other variables that feed into behavioural intention and motivation such as fear, past experience or threat.

## **2.2 Empirical Studies**

Over time, empirical research conducted on health seeking behaviour have spanned wide and captured various likely factors that may impact health seeking behaviour. Factors identified include, predisposing (age, gender, education, culture, beliefs), enabling (income, travel time, waiting time, quality of care, insurance, regular source of care, community assistance, family assistance) and need factors (perceived need for health, individuals' views of how satisfactory or dire a health state is) (Adhikari & Rijal, 2015; Shukla et. al, 2017; Hakmaosa, 2015; Lutala et. al, 2010). In subsequent paragraphs, some of such studies are reviewed in accordance with the categorizations under the adopted framework for this study.

### **2.2.1 Predisposing Factors**

In a study by Adhikari & Rijal (2015), lack of money emerged as the third highest indicator of health-seeking behaviour among the elderly. The study also highlighted the fact that 51% of the respondents belonged to disadvantaged ethnic castes. Thus, ethnicity was significantly associated with health utilization. In addition to this, the importance of economic barriers to healthcare-seeking behaviour was indicated. It was also reported that other sources of income and the socio-economic status of the respondents showed a significant relationship with the health service utilization. A stark limitation of this study is its cross-sectional nature and the tendency to be subject to recall bias.

According to Shukla et.al (2017), a study on the health-seeking behaviour of elderly in the rural area of eastern Uttar Pradesh revealed that the proportion of elderly preferring allopathic medication were comparatively more among subjects > 70 years age, literate, belonging to

Non-Hindu religion and general & OBC category, who were financially dependent on others and those belonging to lower-middle and above socio-economic strata. The health-seeking behaviour of the elderly was found to be profoundly affected by factors such as age-group, literacy status, financial dependency and socioeconomic status.

### **2.2.2 Enabling Factors**

Further studies carried out by Perreira (2017), conducted a study in Humjibre in the Western Region of Ghana. Factors influencing an individual or a family's decision to seek care proved to be many, of which good nutrition was prominent. In addition, limitations to access due to issues related to poor transportation and cost of medical care, coupled with a lack of equipment on the part of medical personnel emerged as influential factors. Owing to the fact that this study was qualitative, the period within which the researcher collected information may not have been long enough for good relations to be established. Also, language must have been a barrier and impeded comprehensive expression of views by the respondents and interpretation of questions posed.

Another study by Hakmaosa et al. (2015) also found in their study that health-seeking behaviour of the elderly had significant associations with socioeconomic status, living status and educational status. In addition, the most common reason cited for not seeking health care was financial reasons. In a paper by Pellet and Jusot (2018), the effect of remittances on health care access by migrant<sup>1</sup> households in Tajikistan is assessed. The findings from this paper proved that the proportion of remittance-receiving households using medical services was slightly higher than the proportion among non-remittance households. This observance was attributed to the reverse causality relationship health needs have with remittances. Thus, the presence of a health need in a household propels the need for remittance and further reduces the chances of renunciation of care by household members. There is a tendency for recall bias

to have occurred during data collection because the study was cross-sectional and spanned over a year.

Another study in Georgia by Gotsadze et al. (2017) revealed that while household wealth did not determine the choice between self-treatment and outpatient services use, this determinant was a strong predictor for choosing outpatient care over no treatment. Consequently, public financing to expand the benefits package with the services needed by chronic patients (such as diagnostics and laboratory services, or outpatient prescription drugs for chronic conditions, etc.) and which are currently being paid by the patients has the potential to increase outpatient service use. A limitation in this study was with how health status of respondents were measured based on only self-perception. However, self-perceived need may be an underestimation of real needs.

According to Lutala et al. (2010), the findings of the study in Goma District proved that the public health sector was well known and preferred by 186 participants (37.2%), but only used by 16 (3.2%) participants. Financial support received by the elderly came from their own relatives and fellow believers in 33.5% and 20.2% of cases, respectively. Almost 71% of monetary support is the result of begging and unknown sources – there is no government involvement whatsoever. Much of the external support that the elderly receive involves support in the form of food. Disease expenses remain a major concern of the elderly themselves. The study highlights Government support for the elderly in the DRC is non-existent. There is an overuse of private sector and traditional medicine, despite the preference indicated for the public health sector. As a recommendation, a general increase in income-related activities could contribute to alleviating the health state of the elderly in a war situation. Further studies might explore in future the contribution of those results on the health of elders. This study used maximum variation sampling hence, it may not necessarily present data that are as accurate as

could otherwise have been obtained from random sampling. Due to the size of the sample and cross-sectional nature of the study, results cannot be generalized to the the entire population.

A similar study conducted at the University of Nairobi Dental Hospital, Kenya highlighted factors affecting the health-seeking behaviour of the elderly who patronize the hospital. Among many factors identified, financial cost emerged as being a significant determinant of the elderly's health-seeking behaviour in the area. 40.9% of the respondents opted to come to the dental clinic due to reasons of cost. The respondents, 27.3% were referred to dental school. Respondents who had other reasons for attending dental school, 25%. A total of 27.3% of the respondents from Nairobi alone opted to come to the hospital because of the low cost. When asked about financial support, almost half of the respondents 48.5% were assisted by their families of which 29.5% were from Nairobi. Self-employed respondents accounted for 27.3%. Only 2.3% of the respondents had other means of financial support, which may have included insurance cover. However, this study revealed that the majority of patients did not have their dental treatment financed through any insurance schemes (Patel, 2006). This research was cross-sectional and thus, results cannot be generalized. The results cannot be considered as rigorous as analysis ran were cross-tabulations and frequency tests.

Another study showed that support from relatives serves as the source livelihood of a larger portion of older people in South West Ethiopia. About 32.57% of older people from the study by Neme (2018) reported their livelihood depends on support from their relatives, while about 12.12% of the respondents reported they depend on pension. The study further revealed that about half (30.56%) of the respondents use their own savings, whereas 25% said they get money for health expenses from their sons/daughters. About 19.44% noted that they borrow money from someone whenever they fall ill. Clearly, the majority of elderly from this study who had health problems but did not seek health services did so, due to a lack of economic support. Some limitations of the study were that very few studies had been done at the national

level and study area level. Thus, the results could not be compared to any other. Due to the fact that respondents had to recount past experiences to respond to questions, there was the likelihood of recall bias.

A study by Fenny, Asante, Enemark & Hansen (2014) also revealed the relationship that wealth quintiles have with treatment-seeking behaviour of individuals in Ghana who may be insured or otherwise. It was found that the wealthier a person is, the more likely it is for the individual to patronize expensive medical care. Based on wealth quintiles adopted in the study, compared to the non-poor, the poor proved to be less likely to choose regional hospitals. Instead, results showed that the poor were more likely to opt for informal health care since it was a cheaper alternative. It is worth noting that no significant relationship was found between wealth status and the effect of health insurance on the use of formal healthcare as hypothesized. The study did not extend the independent factors to include quality of care. Thus, it is difficult to state the effect of the measures of quality of care. Additionally, because the study is cross-sectional, a cause and effect relationship cannot be established between health insurance and treatment-seeking behaviour.

Similarly, Danso-Appiah, et.al (2010) reported that people's failure to visit a hospital or health centre for symptoms of schistosomiasis was found to be mostly due to lack of money. Some other factors that proved to have some effect on health-seeking behaviour were age, payment for health care by someone and socio-economic status. Although, no clear pattern was identified. The study further confirmed that people with a high socio-economic status are more likely to seek health care than people with low socio-economic status, although the effect of socio-economic status is not always significant. Other factors that emerged as influencers of health-seeking behaviour and utilization of health services due to schistosomiasis-related symptoms were proximity to health centre and individual perception of the disease severity and

knowledge of about the disease. The study was rigorous as it employed various analyses to test the association between the predictor and outcome variables.

Likewise, Osei Asibey & Agyemang (2017) looked at the influence of the National Health Insurance Scheme on health-seeking behaviour in rural Ghana. Findings of the study proved that 53.3% of the respondents were uninsured. Among the uninsured, older people were found to be in the majority. Insurance among the employed significantly differed from insurance among the unemployed. Besides these factors, others that proved to influence health-seeking behaviour in this study were household sizes, marriage status and monthly incomes. The survey revealed a generally low patronage in health care services. However, comparatively, respondents who were insured accessed health services more than respondents who were uninsured. Average monthly income showed a significant relationship with healthcare use. Respondents with an average monthly income of less than One hundred Ghana cedis formed the majority among the uninsured. Notably, the number of uninsured respondents reduced with increasing average monthly income. Again, other factors such as level of education, perception of health status and cost of healthcare emerged as determinants of healthcare use in the Bekwai Municipality. This study may be limited due to a recall bias as use of healthcare was self-reported. It is also subject to bias with regards to the sampling procedure as purposive sampling was used.

In a report by the Association of Chartered Certified Accountants on an oversight on some key health challenges in Ghana, findings showed that SSNIT pensioners, indigents aged between 60-69 years and persons aged 70 years and above constituted the least active subscribers to the National Health Insurance Scheme (NHIA, 2017:17). Challenges identified included but were not limited to disparities in service delivery between the Northern and Southern sections of Ghana, cultural beliefs, staff shortages and system inefficiencies and financial leakages. The report noted that the increasing cost pressures on the Ghanaian health system poses a threat to

the financial sustainability of the National Health Insurance Scheme. In response to this shortcoming, the report states that in the longer term, the government of Ghana plans to switch from annual premiums payment to a one-time premium payment. This is intended to broaden coverage of the scheme. The report, however, fails to highlight how the transition to a one-time premium will be implemented and the economic implications it would subsequently have on the country's health sector.

In a study by Sarfo (2015), the relationship between socio-economic status and health-seeking behaviour for orthodox treatment of cardiovascular disease was assessed. The results of the study, however, showed that socio-economic status did not determine health-seeking behaviour. This is because participants who were found to be in low and high socio-economic statuses both sought orthodox healthcare services. This study was limited in its scope as it focused on people with only cardiovascular diseases. Additionally, due to the predominance of the Akan ethnic group in the study area, data collected may not necessarily be a reflection of the opinions of the other ethnic groups.

In an assessment of care-seeking behaviour in the Asikuma-Odoben-Brakwa District by Amegbor (2017), the findings indicated that factors such as geographic location, health insurance, and perception of the cost of professional care had a bearing on residents' general care-seeking behaviour. On the other hand, sex, age, relationship status, economic status, and proximity to nearest biomedical care service influenced the type of treatment sought for last illness. The paper also highlighted the fact that Ghanaians use a plethora of cures and remedies to treat sicknesses and meet their health care needs. This study showed that overall, respondents maintained a general health-seeking behaviour regardless of economic status, which is, being formally or informally employed. On the other hand, NHIS membership and perceived cost of professional medical care had significant relationships with general care-seeking behaviour. Further, it was found that respondents who were active NHIS subscribers opted for professional

medical care whiles, respondents who perceived professional medical care and professional indigenous care as costly, opted for self-care as their general care-seeking behaviour. A setback in this study is how the conceptual framework does not reflect the impact of respondents' health needs on care seeking behaviour. Similarly, the cross-sectional nature and small sample size limits the tendency of establishing causality.

In the same vein, Adongo & Asaarik (2018), found in their study among rural dwellers in under-resourced communities in Ghana that, about 44% of the respondents had an average household income of less than US\$400. The choice of treatment by respondents in events of ailments were significantly associated with household income, occupation, distance and educational status. In addition, the frequency of visits to healthcare facilities was associated significantly with age, income, distance, educational status and occupation. Cost of healthcare services, however, emerged as a major setback in healthcare-seeking behaviour among the respondents. Even though the sampling procedure was rigorous, the study was cross-sectional. As such, findings could not be generalized to the larger population.

### **2.2.3 Need Factors**

Meanwhile, a study by Nuhu (2018) showed that out of 483 respondents, 34.4% sought care from government health facilities, 28.6% self-medicated with pharmaceutical drugs while 17% self-medicated with herbal drugs. In addition, 11.2% sought care from private health facilities, 4.8% from traditional/herbal practitioners and 4.1% opting from faith healing. Although the elderly were not included in this study, age and insurance status were found to be statistically significant in predicting health-seeking behaviour at government hospitals and self-medication with herbal drugs. Again, age emerged as the only statistically significant demographic factor in predicting self-medication with pharmaceutical drugs. Income proved to be a significant determinant of health care seeking with traditional/herbal practitioners while region of residence was revealed to significantly influence health care seeking with faith healers.

Delimiting aspects of this study center on the fact that information provided were self-reported and selected constructs of the health belief model were used by the researcher in addressing the research questions.

### **2.3 Summary**

This chapter showcases the varying yet limited in scope literature, closely related to this study.

The Anderson Newman framework of health utilization was adopted as a theoretical outline to guide the review of literature. Major findings from the literature are also noted and discussed.

## CHAPTER THREE

### METHODS

#### **3.0 Introduction**

This part of the study describes systematically the method adopted to answer research questions and the objectives of the study. This section of the study will explain in detail the sources of data, the methodology employed for analysis and the analytical tool that was used to execute this. This chapter gives detailed information on the process of data collection and the processing of the data to achieve the set objectives. The chapter begins with information on the study area, study design, sampling process, variables of interest, measures, data handling, statistical analysis, dissemination of results and ethical issues. This process is going to be used to identify the appropriate data for the purpose of arriving at a constructive conclusion.

#### **3.2 Study Design**

A quantitative secondary data analysis was conducted. Data from the WHO Study on Global Ageing and Adult Health Wave 2 was used in this study. Secondary analysis refers to the analysis of data originally collected by another researcher, often for a different purpose. This study design was ideal because it was economical and covered a wide breadth of representative sample.

WHO's SAGE was a longitudinal study which collected data on adults aged 50 years and older, plus a smaller comparison sample of adults aged 18–49 years, from nationally representative samples in China, Ghana, India, Mexico, Russian Federation and South Africa. SAGE was supported by the US National Institute on Aging, Division of Behavioural and Social Research and national governments. The survey collected data at the household level and from individuals also. The total sample size for the survey was 4,704. The household dataset covered sections on sampling information, geocoding or GPS information, re-contact information, household contact record, household roster, household consent, housing, household and family support networks and transfers, assets and household income, household expenditure,

interviewer observations and verbal autopsy. The sections in the individual dataset comprised of socio-demographic characteristics, work history and benefits, health state descriptions, anthropometrics, performance tests and biomarkers, risk factors and prevention health behaviours, chronic conditions and health services coverage, health care utilization, social networks, subjective well-being and quality of life, impact of caregiving and interviewer assessment.

### **3.2.1 Sampling**

The sample of 2,280 was derived from the number of respondents with the necessary inclusion criterion. The inclusion criterion was:

- The respondent must have been 60 years and above

### **3.2.3 Variables**

The variables included in this study were categorized as follows:

- Financial sources
  - Household-level sources (NHIS)
  - Individual-level sources (remittances, Out-of-pocket payments, private insurance)
- Other determinants:
  - Community support
  - Family support
  - Government support
  - Total additional benefits
  - Age
  - Gender
  - Ethnic Groups
  - Employment status
  - Job sector type
- Formal healthcare
  - Private/public health facilities
- Informal healthcare

- Traditional herbalists
- Self-medication

**Table 1.2 Variables and Expected Effects**

<b>Variables</b>	<b>Expected Effects</b>
Age	Control
Marital status	Control
Sex	Control
Highest level of education	Control
Religion	Control
Work history and benefits	+/-
Family & Kin Assistance(Transfers In)	+/-
Government Assistance (Transfers In)	+/-
Community Assistance (Transfers In)	+/-

In order to test for the influence of various financing sources on health care seeking behaviour, the study will look at variables enlisted in the table above. Age is expected to have a positive impact on healthcare-seeking behaviour as the older one is, the higher the demand for healthcare (Shukla et.al, 2017). Marital status is also likely to have a significant relationship with health-seeking behaviour (Osei Asibey & Agyemang, 2017). Sex is expected to have a positive impact on health-seeking behaviour in the event of illness as found by Amegbor (2017). Level of education attained by the older person is likely to positively influence care-seeking behaviours. This is because, the higher the educational level, the more likely it is for the individual to recognize the need to seek care in the event of sickness. Religious affiliations tend to also influence care-seeking behaviours, specifically, with the type of care as some

individuals may be indoctrinated to not believe in orthodox health care services. An elderly person with a history of previously being employed formally or informally, with or without benefits may or may not seek care in the event of illness. Social networks, family and kin transfers/remittances, government assistance, community transfers and assistance, assets and household income, as well as subjective well-being and quality of life have the tendency to impact care-seeking behaviour positively or otherwise (Osei Asibey & Agyemang, 2017; ACCA, 2013; Sarfo, 2015; Lutala et. al, 2010; Neme, 2018).

**Table 1.3 Measures**

<b>Independent Variables</b>	
Age	Participants were asked “How old are you now?” This was to be age at last birthday. This variable was subsequently recoded to contain only participants aged 60 years and above.
Education	“What is the highest level of education that you have completed?” was asked. Education was defined by the highest attained level of the participants. The options available under this variable as a response were recoded to include “None”, “Less than primary education”, “Completed primary education”, “Completed secondary school”, “Completed High school” and “Completed college/university”.

Sex	Participants were asked whether they were male or female.
Ethnic Groups	This was assessed based on reported ethnic groups from the participants. It was recoded to include “Akan”, “Ga-Adangbe”, “Ewe”, “Guan” and “Other” in order to measure participants’ association with an ethnic group.
Religion	This was measured by self-report of the participants on which religion they subscribed to. This was also recoded to consist of <i>None, Christianity, Islam, primal indigenous</i> and <i>other</i> .
Currently employed	<p>Current working status was assessed with the question “Have you worked for at least 2 days during the last 7 days?” The response options were “Yes” and “No”.</p> <p>Payment type: Participants who responded “yes” to being currently employed had to specify the type of payment they received for their work. This was measured with 4 items- “cash only”, “in-kind only”, “cash and kind” and “not paid”.</p>

<p>Payment type</p>	<p>Participants who responded “yes” to being currently employed had to specify the type of payment they received for their work. This was measured with 4 items- “cash only”, “in-kind only”, “cash and kind” and “not paid”.</p>
<p>Job-sector employer</p>	<p>To determine the participants’ employer in their current or recent jobs, the items “public sector”, “private sector”, “self-employed” and “informal employment” were adopted.</p>
<p>Total additional benefits</p>	<p>This was measured with two main items, “In this main job, do/did you receive benefits in addition to your payment in cash or in-kind?” and “Which of the following benefits did you receive?” The responses were recoded to reflect the <b>total number of additional benefits</b> received, starting from 0 to 4. A new variable was generated to include the recoded responses.</p>
<p>Financial sources for working elderly (individual)</p>	<p>A list of five responses were read to the participants. They each have “yes” and “no” as their responses. Participants reported which of the sources from which they had received income as a result of work. The sources were <i>Wages/salary from job</i>,</p>

	<p><i>Earnings from trading, Income from rental of property, state old-age pension/pension fund/social security benefit, Interest from savings account/fixed deposits.</i> These sources served as the basis for measuring the working elderly's sources of income.</p>
<p>Need for care</p>	<p>Participants' need for care was measured using the question, "since we last spoke with you, when was the last time you needed healthcare?" The options were such that participants could specify in days, months or years. The responses were recoded to have summative responses of "yes" and "no".</p>
<p>Community support</p>	<p>This was also assessed based on responses that indicated whether or not support from community (clubs or groups in the community) were received. Specifically, responses to the types of support (money/tuition/loans/cash, food/land/livestock and household chores/care/transportation) were considered in measuring this variable.</p>
<p>Family support</p>	<p>This was assessed based on responses that indicated whether or not support from family (children, siblings or parents) and relatives</p>

	<p>(other kin) were received. Specifically, responses to the types of support (money/tuition/loans/cash, food/land/livestock and household chores/care/transportation) were considered in measuring this variable.</p>
<p>Government support</p>	<p>This was assessed based on responses that indicated whether or not support from government was received. Again, responses to the types of support (money/tuition/loans/cash and food/land/livestock) were considered in measuring this variable.</p>
<p>Household financial sources</p>	<p>To assess this, the question, “In the last 12 months, which of the following financial sources did your household use to pay for any and all health expenditures?” was posed. The “yes”, “no” and “don’t know” responses were used in measuring the frequency of each of the items – “Current income of any household members”, “Savings”, “Payment from a health insurance”, “Sold items”, “Relatives or friends from outside the household”, “Borrowed from financial institutions or agencies” and “Other”.</p>

Marital status	This was to find out the current marital status of participants at the time of the interview. This was assessed based on responses which were <i>never married, currently married, cohabiting, separated/divorced</i> and <i>widowed</i> .
<b>Dependent Variable (Health seeking behaviour)</b>	
Use of healthcare	This was defined as where an elderly person sought care in the event of sickness. Responses from the question, “Thinking about healthcare you needed in the last 3 years, where did you go most often when you felt sick or needed to consult someone about your health?”, were recoded to “formal healthcare” and “informal healthcare” and used as a measurement.

### 3.3 Data Handling

Data was coded where necessary in order to fit descriptions previously provided in literature and by the primary investigator. Pre-testing was not conducted as the data is standardized as per the WHO criteria. Supervision was done by the primary investigator’s assigned thesis supervisor. Training on how to use STATA to analyse the data was catered for by the School of Public Health as scheduled to be inclusive in the coursework. Data and analyses drawn, was kept confidential via safekeeping in secure folders.

### **3.4 Statistical Analysis**

The analysis of the data was done using descriptive statistics such as frequency tables, graphs, pie charts and measures of association. Inferential statistics was also employed in analysing the data. Specifically, logistic and bivariate regression analysis and correlation coefficient were used in testing the association between independent and dependent variables.

### **3.5 Dissemination of Results**

The results from the analysis will be shared with the School of Public Health, the WHO, Ghana country office, the Centre for Ageing Studies, University of Ghana, workshops and seminars on health financing and the elderly and journal platforms.

### **3.6 Ethical Issues**

**Ethical Approval:** Ethical approval was sought from the Ghana Health Service and a formal request was made to the World Health Organization for the SAGE Wave 2 datasets for Ghana.

**Confidentiality:** The primary researcher ensured that data retrieved from the data set and all information gained were kept in confidence.

### **3.7 Summary**

This chapter was aimed at presenting the methodology to be adopted in carrying out the study. It highlights the adoption of the quantitative research approach and STATA/IC 15.0 in analysing secondary data. The data obtained was a Study on Global Ageing and Adult Health (Wave 2) by the World Health Organization in Ghana. Variables were listed and described, with a dissemination plan and inherent ethical issues highlighted.

## CHAPTER 4

### RESULTS

#### 4.0 Introduction

This chapter presents the empirical findings and discussion of the estimations carried out to achieve and answer the specified objectives and research questions of the study respectively. The results start with a brief report of the socio-demographic profile of both individuals and households as identified by the WHO SAGE Wave 2 datasets. The chapter acts on the research questions as provided in the beginning chapter and presents empirical findings in the form of tables and figures to illustrate the estimated results for the health-seeking behaviour of elderly persons based on the responses provided by 2,280 participants. The chapter further analyses the extent to which certain predisposing, enabling and need factors influence the use of formal healthcare by the elderly. This is preceded by reports on the findings of the impact of socio-demographic factors on use of formal healthcare.

#### 4.1 Data Description

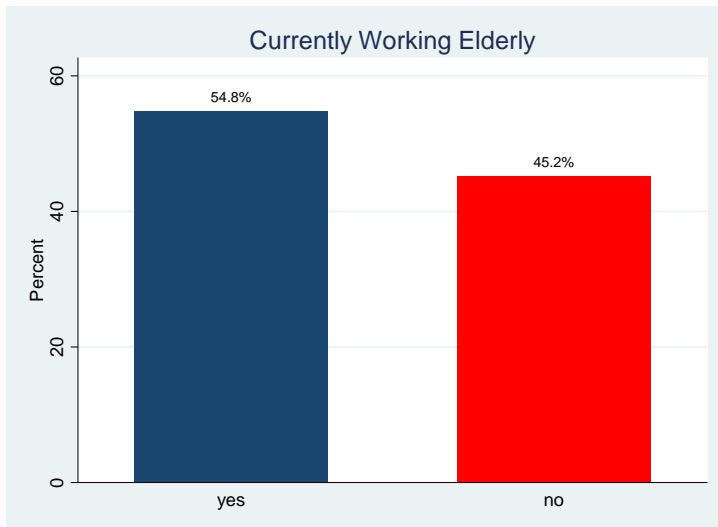
Table 1.4 provides information on the socio-demographic characteristics of the participants in this study. The total sample size for the study was 2,280. The female population was 54.66%, while males accounted for 45.34% of the population. In terms of age, 52.87% of participants fell in the brackets of 60-69 years, with 47.13% being 70 years and above. The Akan ethnic group dominated, comprising 45.12% of the sample population. The least represented ethnic group was the Guan (4.22%). A majority (52.46%) of participants indicated they had no formal education. 11.69% completed secondary education while the minority (3.70%) completed tertiary education. Christianity comprised of a majority (71.23%), Islam (18.07%) and other religions in the minority (1.50%). 50.52% of the participants indicated being currently married, 35.27% were widowed, 11.11% separated or divorced, 2.62% never married and 0.48% cohabiting. Other socio-demographic variables are detailed in the table below.

**Table 1.4 DESCRIPTIVE SUMMARY OF SOCIO-DEMOGRAPHIC VARIABLES**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Sex</b>		
Male	1,015	45.34
Female	1,265	54.66
<b>Age</b>		
60-69	1,105	52.87
70+	1,175	47.13
<b>Ethnic Groups</b>		
Akan	1,108	45.12
Ewe	140	8.07
Ga-adangbe	297	14.58
Other	633	28
Guan	96	4.22
<b>Education</b>		
None	1,265	52.46
Less than primary	265	11.64
Completed primary	195	10.19
Completed secondary	252	11.69
Completed high school	225	10.33
Completed college/university	78	3.70
<b>Religion</b>		
Christianity	1,640	71.23
Islam	401	18.07
Primal indigenous	112	5.15
Other	36	1.50
None	85	4.06
<b>Marital status</b>		
Never married	59	2.62
Currently married	1,106	50.52
Cohabiting	10	0.48
Separated/divorced	257	11.11
Widowed	848	35.27
<b>Use of formal healthcare</b>		
Informal	83	5.47
Formal	1,349	94.53
<b>Family Assistance</b>		
Money, Tuition, Loans	579	69.61
Food, Land, Livestock	313	35.37
Household chores, care	164	17.17
<b>Community Assistance</b>		
Money, Tuition, Loans	9	21.69
Food, Land, Livestock	10	27.48
Household Chores, Care	2	8.48
<b>Government Assistance</b>		
Money, Tuition, Loans	21	60.85
Food, Land, Livestock	3	12.77

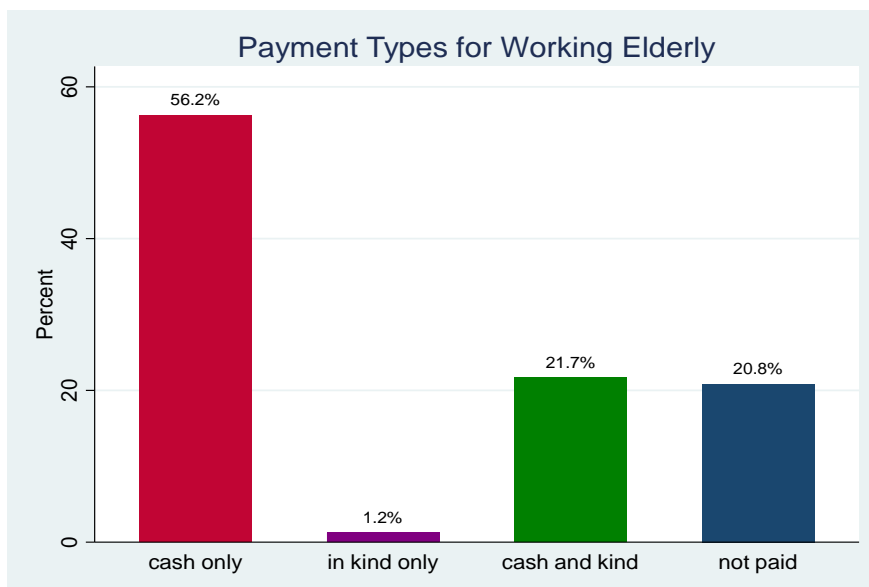
Source: WHO Study on Global Ageing and Adult Health, Wave2 dataset, 2014

The survey revealed that a majority 54.8% of elderly were currently in work while 45.2% were unemployed. This is evident in Figure 1.2.



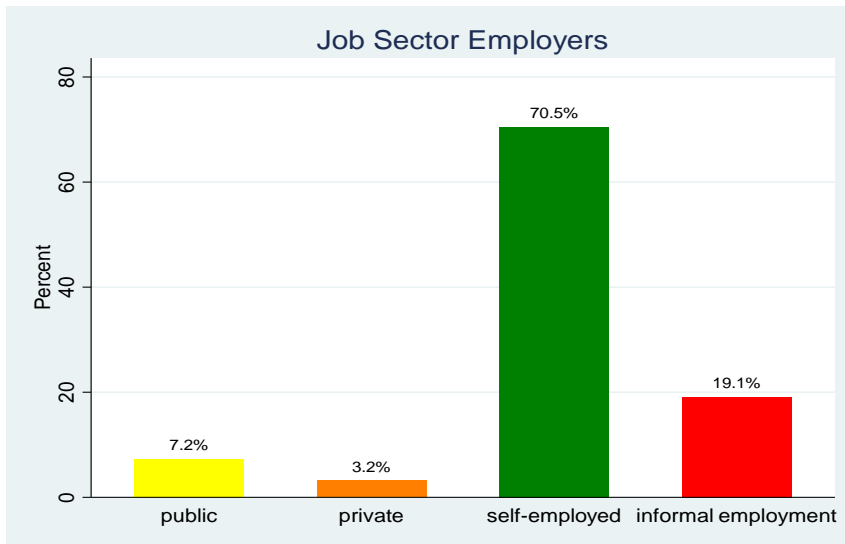
**Figure 1.2: Currently Working Elderly**

In terms of payment types, cash only was found to be the highest-ranked at 56.2%, followed by cash and kind at 21.7%. Other types of payment came in the form of kind only and not paid.



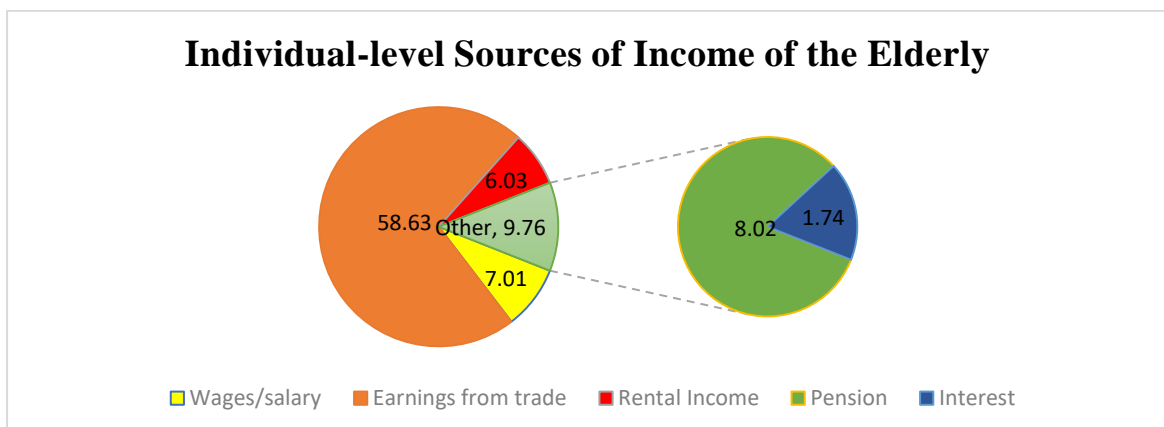
**Figure 1.3: Payment Types for Working Elderly**

Figure 1.3 shows what participants reported as the various job sectors they are employed in. More than half of the participants were self-employed (70.5%) or worked in the informal sector (19.1%). The public sector, however, employs only 7.2% of the elderly.



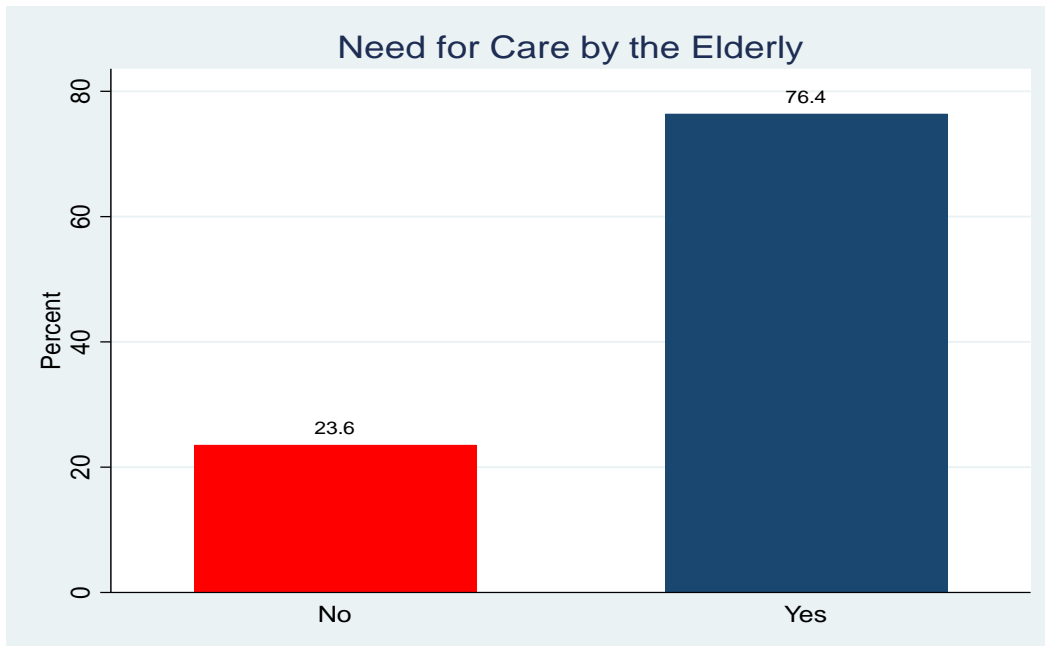
**Figure 1.4: Job Sector Employers of the Elderly**

The sources of income for elderly persons who were currently employed at the time of the survey showed that earnings from trade was the highest occurring (58.63%). This was followed by pension benefits (8.02%). Wages/salary, rental income and interests occurred the least.



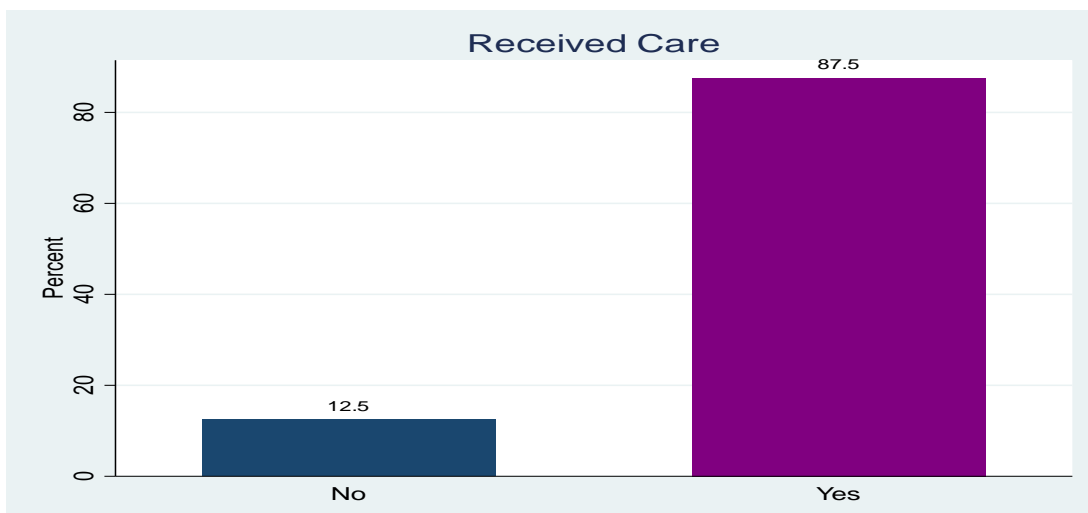
**Figure 1.5: Individual-level Sources of Income of the Elderly**

With regards to the elderly's perception of their need for care, 76.4% reported the affirmative. On the other hand, 23.6% reported not needing care.



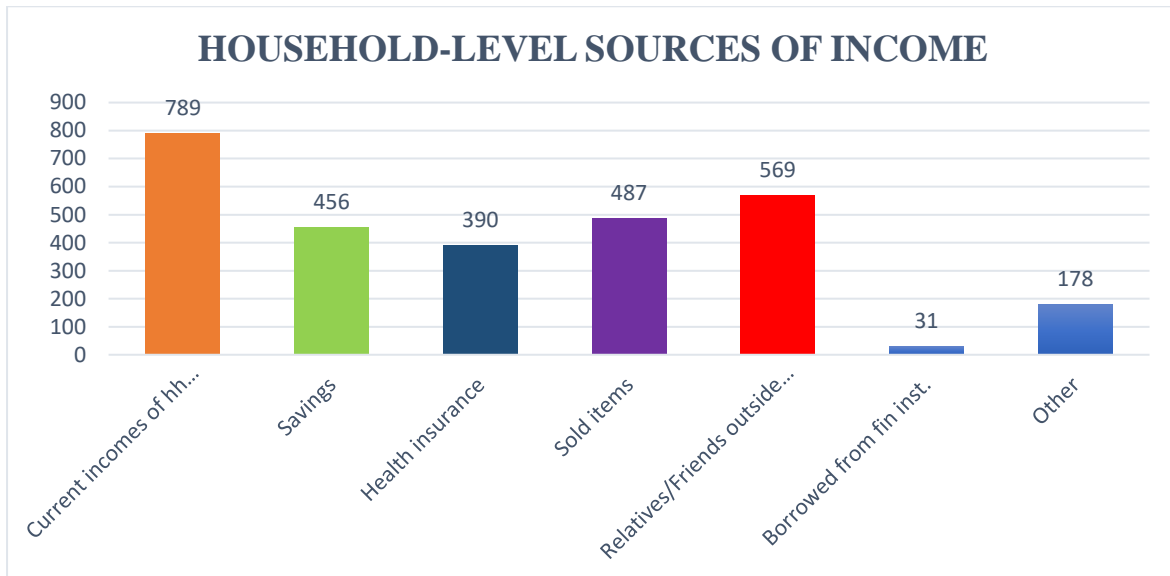
**Figure 1.6: Need for Care by the Elderly**

When participants were asked about whether or not they received care, 87.5% reported receiving care while 12.5% did not receive care.



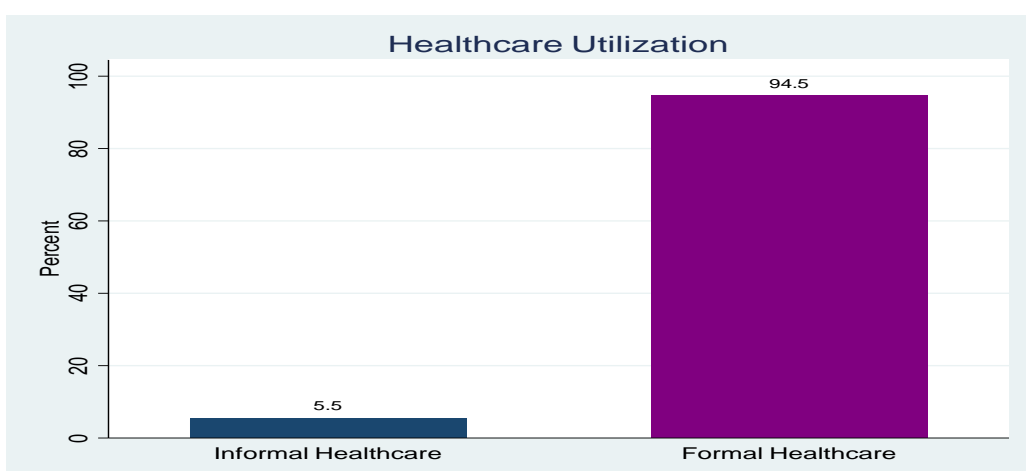
**Figure 1.7: Received Care**

Investigations into the sources of income for elderly persons at household level showed that elderly persons are largely dependent on the income of household members. Following this were “Relatives/Friends”, “Sold Items” and “Health Insurance”.



**Figure 1.8: Household-level Sources of Income**

The healthcare utilization of these elderly was measured by the type of care sought in the event of illness. A majority (94.5%) of participants were found to opt for formal healthcare. Only 5.5% indicated their preference for informal healthcare.



**Figure 1.9: Healthcare Utilization**

**Table 1.5 Summary Statistics of Other Predictor Variables**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Total additional benefits</b>		
None	1815	87.89
1 benefit	170	8.84
2 benefits	42	2.09
3 benefits	23	1.00
4 benefits	5	0.18
<b>Individual source of income</b>		
Wages/Salary	151	8.30
Earnings	1267	57.89
Rental income	129	7.03
Pension	171	9.16
Interest	37	1.65
<b>Household financial sources</b>		
Current income of members	789	35.2
Savings	456	20.87
Insurance	390	17.95
Selling items	487	19.52
Family/friends	569	24.52
Borrowing from fin. Institutions	31	1.28
Other	178	9.20

Source: WHO Study on Global Ageing and Adult Health, Wave2 dataset, 2014

Table 1.5 illustrates the summary statistics of other predictor variables that could influence elderly persons' use of formal healthcare in the event of illness. A majority (87.89%) of individuals received no additional benefits at work while very few (0.18%) received four benefits. At the individual level, a majority (57.89%) of elderly had earnings from trading as their source of income. The least occurring individual source of income was interest. However, at the household level, elderly persons were found to be largely dependent on the current income of household members (35.2%), while, they least resorted to borrowing from financial institutions (1.28%).

**Table 1.6 Sociodemographic Characteristics of Elderly Persons by Formal & Informal Healthcare**

<b>Variables</b>	<b>Informal Healthcare</b>	<b>Formal Healthcare</b>	$\chi^2$	<b>p-value</b>
<b>Age</b>			6.0869	0.0161*
60-69	48(6.924)	610(93.08)		
70+	35(3.979)	739(96.02)		
<b>Sex</b>			30.817	0.0904
Male	41(6.703)	558(93.3)		
Female	42(4.557)	791(95.44)		
<b>Marital Status</b>			4.6081	0.4201
Never married	3(9.855)	25(90.14)		
Currently married	43(5.812)	630(94.19)		
Cohabiting	0(0)	4(100)		
Separated/Divorced	13(7.486)	164(92.51)		
Widowed	24(4.122)	526(95.88)		
<b>Religion</b>			7.8116	0.2199
Christianity	55(4.724)	1035(95.28)		
Islam	20(9.242)	203(90.76)		
Primal indigenous	4(5.522)	64(94.48)		
Other	0(0)	9(100)		
None	4(6.108)	38(93.89)		
<b>Education</b>			5.6458	0.4637
None	41(4.726)	730(95.27)		
<primary school	14(8.807)	157(91.19)		
Primary school	4(3.854)	110(96.15)		
Secondary school	12(6.203)	151(93.8)		
High school	8(4.749)	146(95.25)		
Tertiary education	4(8.123)	55(91.88)		
<b>Ethnic groups</b>			6.2461	0.3543
Akan	45(5.685)	710(94.31)		
Ewe	2(2.059)	80(97.94)		
Ga-adangbe	10(5.296)	173(94.7)		
Other	21(5.203)	336(94.8)		
Guan	5(11.63)	50(88.37)		
<b>Total benefits</b>			12.3927	0.0595
0	67(5.383)	1126(94.62)		
1	9(11.66)	63(88.34)		
2	0(0)	19(100)		
3	0(0)	13(100)		
4	1(39.09)	2(60.91)		
<b>Job Sector Employers</b>			23.4497	0.0006*
Public	2(1.89)	85(98.11)		
Private	3(6.993)	40(93.01)		
Self-employed	42(4.164)	889(95.84)		
Informal	35(11.78)	275(88.22)		
<b>Need for care</b>			0.0458	0.8104
No	0(0)	1(100)		

Yes	82(5.485)	1335(94.52)		
<b>Family support</b>			0.0026	0.966
No	46(5.536)	772(94.46)		
yes	37(5.474)	567(94.53)		
<b>Government support</b>			0.3039	0.5274
no	82(5.563)	1313(94.44)		
yes	1(3.119)	22(96.88)		
<b>Community support</b>			2.0725	0.1637
no	79(5.387)	1315(94.61)		
yes	4(13.24)	21(86.76)		
<b>Currently working</b>			8.6169	0.012*
yes	57(7.318)	694(92.68)		
no	26(3.766)	632(96.23)		

Source: WHO Study on Global Ageing and Adult Health, Wave2 dataset, 2014

Table 1.6 presents the proportion and percentage share of individual characteristics of individuals who choose formal healthcare and informal healthcare. Across the age brackets, formal healthcare was found to be the most popular choice. However, individuals aged 70+ had a higher percentage of use of formal healthcare (96.02%). Age also proved to be significant in predicting the outcome variable ( $p=0.0161$ ). The gender distribution revealed that females patronized formal healthcare more (95.44%) than males (93.3%). Marital status also showed a higher percentage for use of formal healthcare, for currently married individuals (94.19%), compared to the informal healthcare (5.8%). Christianity had the highest percentage for use of formal healthcare (95.28%) and informal healthcare. Use of formal healthcare had a higher proportion of individuals with no education (95.27%), compared to informal healthcare. Ethnicity revealed that the Akans opted for use of formal healthcare (94.31%), in contrast to informal healthcare. Individuals who received no additional benefits from work patronized formal healthcare more (94.62%) than individuals who received four benefits (60.91%). Job sector employers showed a majority being self-employed (95.84%) and the minority belonging to the public sector (1.89%). Job sector employers was found to have significance in predicting use of formal healthcare ( $p=0.0006$ ). An individual's reported need for care, family, community and government support did not show any significance in predicting use of formal healthcare. However, an individual's

reported current working status revealed a significant association in determining use of formal healthcare ( $p=0.012$ ).

**Table 1.7 BINARY LOGISTIC REGRESSION FOR INDIVIDUAL SOURCES OF INCOME BY USE OF FORMAL HEALTHCARE**

<b>Variables</b>	<b>Use of Formal Healthcare</b>
Wages/Salary	0.170 (0.504)
Earnings	0.969 (0.249)
Rental income	0.365 (0.590)
Pension	0.966 (0.572)
Interest	0.834 (0.863)
Constant	0.166 (1.617)
Number of observations	1,316
R-squared	0.0074

Source: Author's computation

Robust Standard errors in parentheses

\*\*  $p < 0.05$

Table 1.7 shows the relationship between the various sources of income at individual level and use of formal healthcare in the event of illness. It is evident that none of the sources of income of elderly individuals was significant in determining their use of formal healthcare ( $p > 0.05$ ). However, the strength of association between these factors and the use of formal healthcare were positive. The binary logistic model was ideal in investigating this association due to the nature of the outcome variable.

**Table 1.8 BINARY LOGISTIC REGRESSION FOR HOUSEHOLD SOURCES OF INCOME BY USE OF FORMAL HEALTHCARE**

<b>Variables</b>	<b>Use of Formal Healthcare</b>
Current income of household members	0.001* (0.351)
Savings	0.366 (0.233)
Insurance	0.024* (0.330)
Selling items	0.641 (0.315)
Family & Friends	0.307 (0.259)
Borrowing from financial institutions	0.043* (0.173)
Other	0.002* (0.460)
Constant	0.355 (1.735)
Number of observations	1,136
R-squared	0.0847

Source: Author's computation

Robust Standard errors in parentheses

\*  $p < 0.05$

Table 1.8 reports the outcome of a binary logistic regression on sources of income at household level, with respect to use of formal healthcare by the elderly. Current household income, insurance, borrowing from financial institutions and other sources were significantly and positively associated with use of formal healthcare. Savings, Selling items and Family & Friends, although positively associated, proved to be insignificant in predicting use of formal healthcare among the elderly.

**Table 1.9 BINARY LOGISTIC REGRESSION FOR SOCIO-DEMOGRAPHICS BY USE OF FORMAL HEALTHCARE**

<b>Variables</b>	<b>Use of Formal Healthcare</b>
Sex	0.212 (0.334)
Age	0.026* (0.280)
Marital Status	0.855 (0.110)
Education	0.772 (0.094)
Ethnic Groups	0.950 (0.104)
Religion	0.314 (0.120)
Constant	0.053 (0.80)
Number of observations	1,432
R-squared	0.0165

Source: Author's computation

Robust Standard errors in parentheses

\*\* p<0.05

Results presented in Table 1.9, are findings from using the binary logistic regression model to examine the tendency for an elderly person to choose a specific type of care based on socio-demographic factors. From the table, it is evident that all but age proved to be significantly and positively associated with use of formal healthcare.

**Table 2.0 OTHER PREDICTOR VARIABLES BY USE OF FORMAL HEALTHCARE**

<b>Variables</b>	<b>Use of Formal Healthcare</b>
Total additional benefits	0.019* (0.284)
Family support	0.430 (0.263)
Community support	0.019* (0.522)
Government support	0.017* (0.160)
Currently working	0.081 (0.314)
Payment type	0.002* (0.115)
Job Sector Employer	0.000* (0.233)
Constant	0.000 (0.885)
Number of observations	1,253

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R-squared	0.0847
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Source: Author's computation

Robust Standard errors in parentheses

\*\* p<0.05

Table 2.0 illustrates the relationship between other selected predictor variables from the dataset and use of formal healthcare. Findings showed that total additional benefits, community support, government support, payment type and job sector employer were significant in determining the type of care opted for by the elderly in the event of sickness.

## 4.2 Summary

This chapter set out to present the analysis and findings of the study. Findings were presented in tables and graphs, to show the nature of interaction between and among the variables of interest. Regression models used in analysing the data were bivariate and logistic.

## CHAPTER 5

### DISCUSSIONS

#### 5.0 Introduction

This chapter discusses the implications of the findings of this study. This will follow the order in which the main components of the theoretical framework are presented in the second chapter. Major findings in relation to the respective categories within the Andersen and Newman Framework are discussed in the subsequent paragraphs.

#### 5.1 Predisposing Factors

A larger portion of the sample population reported being self-employed (70.5%). Being self-employed as an elderly person in Ghana is a key feature of the elderly population (Ghana Statistical Service, 2013; Figure 1.4). A higher proportion being rural dwellers and the generally low literacy levels could explain why a majority of this population is found in this job sector. Especially for elderly persons, the prospects of having a sustainable job are not very high. The evidence of the elderly's potential to be employed in sustainable job sectors is clear in the number of elderly persons employed within the public and private sectors versus self-employed and informally employed elderly persons (Ghana Statistical Service, 2013).

Contrary to expectation, other socio-demographic characteristics besides age did not show any significance in predicting the outcome when the logistic model was run. However, a linear regression between sex alone and use of formal healthcare was run to test association. This revealed that being a female elderly influenced one's use of formal healthcare ( $p=0.018$ ). It is, therefore, asserted that due to the comparatively higher female elderly population, this influences the use of formal healthcare in the event of illness. Education proved to be insignificant in determining the use of formal healthcare. This meant that an individual's level of education did not play a role in their decision of the type of care they sought when ill. This could be due to other more influential factors that transcend one's educational status. It could also be associated with the fact that education among the elderly population in Ghana is

generally very low (Ghana Statistical Service, 2013). Findings in a study by Yeboah-Mensah, M. (2015) showed that the rationale for healthcare utilization was usually due to factors such as proximity to a facility, short waiting-time, low charges, NHIS provider and availability of drugs. Findings from the logistic regression model used also revealed that religion did not influence use of formal healthcare. Although a majority of participants were reported to belong to one religion or the other, it did not have a significant relationship with the outcome. Similarly, marital status did not show significance in determining the outcome variable as expected.

In line with the researcher's expectations and other reviewed literature, age proved to be significant in determining use of formal healthcare. This is because an increase in age signifies the onset of health problems (Lutala et. al, 2010). This requires that the needed healthcare is sought.

## **5.2 Enabling Factors**

The sources of finance for the elderly can be categorized on two levels- household and individual. At the household level, sources that were identified were current income of household members, insurance, borrowing from financial institutions and other unspecified sources. However, a look at the frequencies in Table 1.5 shows that, apart from the current incomes of household members (35.2%), elderly persons also rely largely on family/friends (24.52%), savings (20.87%) and selling items (19.52%). It is possible that insurance was not reported as a popular option due to the failure of the NHIS and other insurance providers to achieve a wider coverage (Asibey & Agyemang, 2017). Borrowing from financial institutions was one of the least reported options (1.28%). In reports by McKay, Kempson, Atkinson & Crame (2008) and Age UK (n.d.) the authors point out the fact that credit or loans are negatively associated with old age. Hence, as one ages, the likelihood of borrowing reduces. Although payment terms may be friendly, elderly persons were found to have negative views about

borrowing from financial institutions. Some factors identified as contributing to this were poor savings culture in previous years, unemployment, self-employment, low income, short-working lives (McKay, Kempson, Atkinson & Crame, 2008).

At the individual level, sources of income identified for the elderly included wages/salary, earnings from trade, rental income, pension and interest. None of these proved to be significant in predicting the use of formal healthcare by the elderly ( $p>0.05$ ). However, each of these factors showed a positive association with the outcome as presented in Table 1.7.

Earnings from trade at the individual level and selling of items at the household level were both insignificant in determining the outcome. However, earnings appeared to be the highest-ranking source of income for the elderly at the individual level (57.89%). This is possible due to the fact that the majority of elderly people who are self-employed (70.5%) do not depend on earnings from trade because it may not be sufficient (Neme, A., 2018). Wages/Salary, pension and interest were the least reported individual financial sources (Figure 1.5). The low-level engagement of elderly persons in the public and private sector as shown in Figure 1.4, poor patronage of pension schemes due to minimal preparation for old age and unfriendly investment conditions for elderly persons could contribute to these findings. It is noteworthy that benefits received from pension schemes in Ghana are determined by one's contributions to the scheme during one's working life. Thus, benefits are calculated based on the number of years an individual has contributed to the scheme and this determines the percentage of pension right an individual is entitled to ("Benefits – SSNIT", 2019). The retirement age in Ghana is 60 years. This could also explain why very few elderly persons are employed in the public sector (7.2%) and private sector (3.2%) respectively.

This leaves the elderly the option to be largely dependent on household sources of finance for healthcare. This is an indication of the fact that, regardless of what an individual's personal

source of income maybe in the old age, he or she is more likely to depend on the sources of income available at the household level.

Household care was identified as one of the types of support given by families and communities to some elderly people in the findings. Household care here implies caregiving by a relative, friend or third party and the availability of assistance with activities of daily living such as household chores. When examined as a type of support provided by family and community, it was found that social care was one of the lowest occurring options. As a type of support from families, 20.5% of support given was accounted for as household chores and care. As a form of support from the community, household chores and care represented 7.14% of the total support rendered. It was unusual this was non-existent as a type of support provided by government. This highlights government's narrowed focus on types of care that should be made available to its elderly population. The findings on support from family and the community raise questions concerning provisions under the National Ageing Policy (2010) which presumes that government would establish programmes to strengthen the role of families and communities in the ageing process of elderly relatives. Specifically, the policy states government's efforts towards upholding the family structure and norms as known in the Ghanaian system, capacity enhancement and education for caregiving and programmes and policies to facilitate attitudinal change towards caring for the elderly. However, these were contrary to the findings on household chores and care provided as support by families and communities for the elderly in Ghana.

Findings on community support also disclosed the fact that it was significant in determining the kind of care an elderly person would choose when ill. This goes on to signify that elderly persons rely largely on their social network in the event of sickness. This can be considered an avenue to generate funds that would go into supporting the elderly's health.

This study found that a minority (12.11%) of elderly who were currently working received, additional benefits. These additional benefits include pension/retirement benefits, medical/health services, food/provisions and cash bonuses. This suggests that the availability of additional benefits from work determine the type of care an elderly person would seek. With regards to payment type, it was found that the alternatives available to the elderly were cash only (56.2%), kind only (1.2%), cash and kind (21.7%) and not paid (20.8%). From this, it is obvious that cash only is the most common form of payment for the working elderly. This further suggests that in situations where cash payments received are insufficient for health expenditure, the elderly must fall on other available options. In addition, a significant number of elderly persons reported not being paid for work done. This could contribute to the alternative source of income and the type of care they resort to in the event of illness.

### **5.3 Need Factors**

A majority of the sampled population were aged between 60-69 years (52.87%) (Table 1.4).

This proposes that more elderly persons will demand healthcare and more specifically, formal healthcare. This may be attributed to the high demand for more specialized care as individuals grow old. Access to insurance and other financial sources could also contribute to use of formal healthcare. This demand is influenced by older persons' access to income (Heinrich, Rapp, Rissmann, Becker, & König, 2010; Macha et al., 2012).

Formal healthcare comprises utilization of healthcare services from public health facilities, private health facilities, pharmacies and charity/church-based health facilities. On the other hand, informal healthcare consists of traditional medicine and others such as self-medication or household care. A breakdown of the various types of formal healthcare options reveal a higher choice for public health facilities (74.42%), followed by private health facilities (14.46%), Charity/Church health facilities (7.33%) and pharmacies (3%). On the other hand, informal healthcare options presented 1.4% each for traditional medicine and others.

#### **5.4 Policy Recommendations**

The drive and findings of this study point our minds to the fact that the solution for financing health for a growing elderly population and a prospective large elderly population by 2050 is by ensuring that favourable post-retirement labour arrangements are made for the elderly. Thus, elderly persons who are active, can still keep working to increase their savings, depend less on income of household members and remain subscribed to a health insurance. As part of labour arrangements tailored to suit the elderly, payment types could be customized to fit the evolving needs of the elderly in organizations. This would require lobbying and advocacy on the part of health economists and all public health practitioners who appreciate the role health financing plays.

Another practical way would be to promote a savings culture, specifically for health due to its unpredictable nature. Public health practitioners and social workers should be responsible for and devoted to sensitizing people on the changing nature of the country's population and its economic implications on dependency levels and availability of health resources. The older one gets, the more specialized care is demanded. Therefore, this calls for attention and resources to be channelled towards creating and enhancing healthcare facilities to be age-friendly and age-responsive.

Finally, it would be worth-while to have more research conducted in the area of ageing, ageing and health, the role civil society can play in financing care for the elderly and a replication of this study at district and regional levels to present the true picture of the situation in Ghana.

#### **5.5 Summary**

This chapter discussed the findings on how financial sources influence the care-seeking behaviour of the elderly in Ghana. Key findings revealed that financial sources can be categorized into two- individual level and household level. Individual-level sources of finance did not show significant relationships with the outcome. However, some household sources could predict the use of formal healthcare. Also, the elderly were found to patronize formal

healthcare the most. Other determinants identified as very likely to influence the use of formal healthcare were age, current employment status, job sector employer and type of payment received.

## CHAPTER 6

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.0 Introduction

This chapter summarizes the key findings and the inputs of the study to the body of literature on elderly-related issues. It as well highlights recommendations for improvements in health financing for the elderly and further studies on the elderly and health financing in Ghana.

#### 6.1 Summary of Study

Evidence from this study shows that financial options available to the elderly in the event of illness can be categorized on two levels. They are, the individual level and household level.

The individual level sources of income proved to have no association with the elderly's use of formal healthcare. Meanwhile, household-level sources of finance such as current income of household members, insurance, borrowing from financial institutions and other unnamed sources were significant in determining the use of formal healthcare. From the study, it was clear that the elderly used either formal or informal healthcare. Formal healthcare stood out as the most common form of healthcare utilized by the elderly. Other factors identified as being influential in the elderly's use of healthcare included total additional benefits, community support, government support, payment type and job sector employer.

#### 6.2 Conclusion

In conclusion, this study adds to literature as its findings suggest that financial options available to the elderly in Ghana can be viewed on two different levels. The various types of options relate differently with health seeking behaviour. This finding suggests the need to maximize various financing mechanisms for health for old age. The use of formal healthcare by most elderly persons as found in the study can be linked to predictive factors such as the various financing sources available, job sector employer, payment types, among others. This study is of essence because it adds to literature on issues regarding gerontology and financing healthcare for the elderly. It brings to light the inherent issues that contribute to the popularly reported issue of financial constraint in scholarly work on health-seeking behaviour of the

elderly. Insight is also provided on the various financing alternatives still utilized by the elderly. The study makes apparent, the usefulness of other financing options in healthcare choices and the role of other relevant stakeholders such as the family and community are emphasized to demonstrate how these parties could contribute to enhancing the health-seeking behaviour of the elderly population.

### **6.3 Policy recommendations and Areas for Future Research**

As a result of the findings of this study, the underlisted are recommended for policy implementation and future research:

1. The effective implementation of favourable post-retirement labour arrangements to keep the elderly engaged in profitable work even after retirement.
2. The promotion of a savings culture for health. This would make individuals financially prepared for health issues that come with ageing.
3. More research should be conducted in the fields of ageing, ageing and health and the role of civil society in health financing to augment previous studies conducted in Ghana.

### **6.4 Limitations of the study**

The study had some limitations which are highlighted below:

The first limitation was concerning how some of the questions in the questionnaires were posed. Due to the restrictive nature of the questions, it was impossible for the researcher to recode certain variables to suit the study's intended framework. Another limitation was the absence of responses for questions posed during the survey. Although missing values can be anticipated in every study, due to the extent of missing values recorded for certain questions, it limited the use of certain variables in the study. The absence of responses may have also contributed to some unexpected outcomes following the analysis.

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