**ENSIGN COLLEGE OF PUBLIC HEALTH- KPONG**

# FACTORS INFLUENCING ENROLMENT INTO THE NATIONAL HEALTH INSURANCE SCHEME: A CASE STUDY OF LOWER MANYA-KROBO MUNICIPALITY - EASTERN REGION, GHANA

**BY**

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## DECLARATION

I, **SUSAN EMELDA CHOBBAH** hereby declare that apart from specific references which have been duly acknowledged, this dissertation is my own work put together under the supervision of Dr. Stephen Manortey and that this work has not been presented in part or whole for the award of any other degree.

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## DEDICATION

This study is dedicated to God Almighty for his Grace and Mercies which carried me through this program. It is also for my lovely children Kirk Matthew Chobbah and Karen Miriam Chobbah you were my inspiration. I also dedicate it to my sisters for their encouragement during the period.

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I am forever grateful to God Almighty for his grace and favour that led me throughout this programme. I thank Dr. Steve Manortey, my supervisor for his invaluable support and direction accorded me during my research work.

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## ABSTRACT

**Background:** Health care financing is one of the major challenges facing the healthcare delivery sector in Ghana. Health financing in Ghana prior to independence was predominantly by out-of-pocket payments at the point of service use. Since 2003, the country introduced the National Health Insurance Scheme as a mean to lessen the burden of the people in terms of health care cost. However, over 15 years of its implementation, there is still the problem of enrolment and retention. This study was undertaken to determine the factors associated with enrolment and renewal into the National Health Insurance Scheme

**Methods:** The study employed a cross-sectional study design with a quantitative approach to determine the factoring influencing NHIS enrolment in the Lower Manya Krobo Municipality. A total sample size of 362 was used and data were collected through questionnaire administration. Both descriptive and inferential statistics were performed to ascertain the relationships among variables. A p-value<0.05 was considered as significant level with 95% CI.

**Results:** Almost all the respondents (98.1%) have heard about the Ghana Health Insurance Scheme. Major sources of such information were from Radio and Television, and family or relatives. NHIS enrollment stood at 69.1% and factors such as age (p=0.033), sex (p<0.001), educational level (p<0.001) and income status (p<0.05) were significantly associated with enrolment. Again, 90% had expressed their intentions to renew membership. Factors such as education, marital status, and income were also associated with respondents' intentions to renew membership.

**Conclusion:** Although NHIS enrolment was found to be higher than the national average, there was still over 30% of the respondents who were not and have never enrolled. More efforts are recommended to achieve total enrolment by all.

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## ACRONYMS/ ABBREVIATIONS

| | |
|---|---|
| AOR | Adjusted Odds Ratio |
| CHPS | Community Health Planning and Services |
| CI | Confidence Interval |
| COR | Crude Odds Ratio |
| HF | Health Facility |
| J.H.S | Junior High School |
| LI | Legistrative Instrument |
| LMKM | Lower Manya Krobo municipal |
| NHIA | National Health Insurance Authority |
| NHIS | National Health Insurance Scheme |
| NLC | National Liberation Council |
| REF | Reference |
| SDGs | Sustainable Development Goals |
| SHI | Social Health Insurance |
| S.H.S | Senior High School |
| SSA | Sub-Saharan Africa |
| SES | Socio-Economic Status |
| TECH | Technical School |
| UHC | Universal Health Coverage |
| VOC | Vocational School |

| | |
|---|---|
| WHO | World Health Organisation |

# CHAPTER ONE

# 1.0 INTRODUCTION

## 1.1 Background to the study

One major challenge facing healthcare delivery in Ghana is financing**.** Health financing in Ghana prior to independence was predominantly by out-of-pocket payments at the point of service use (Arhinful, 2003). This, however, changed under the First Republic, from the late 1950s up to 1966, when healthcare financing in Ghana was in line with the socialist philosophy of the then government and was virtually free as was education and other social services. Following the overthrow of the then government, healthcare financing in Ghana saw a complete 'U-turn' (Wagstaff, 2009). Under the military-cum-civilian junta of the National Liberation Council (NLC), Ghanaians were asked to pay for their healthcare services at the delivery points. This continued until the introduction of the National Health Insurance Scheme (NHIS) in 2004 (Ghana Statistical Service, 2006).

As at 1981, the economy of Ghana had deteriorated to such an extent that the government wandered how to find the best combination of Government-Peoples-Partnership that would meet each other part of the way and satisfy the needs and pockets of Ghanaians as well the government's finances in the healthcare sector (National Health Insurance Authority-Annual Report, 2010). 'Cash-and-Carry' system of healthcare financing was thus introduced, where patients were required to pay for drugs and some medical consumables, as and when they visit the hospital, while the state bore all other costs including consultation, salaries, and emoluments for doctors, nurses and other healthcare workers in state hospitals. The 'Cash-

and-Carry' system also provided for free medical care for the aged above 70 years of age, children under five years and pregnant women for their ante-natal care, all under an exemption programme implemented with that system of financing. The 'Cash and Carry' system survived until 2004 when the present health insurance system came into being (Ministry of Health, Annual Report 2006).

In 2003, there was a paradigm shift in Ghana's quest for a more humane, affordable and reliable mechanism of financing healthcare with the introduction of the NHIS. The scheme was to replace the hitherto horrible Cash and Carry system of paying for health care at the point of service, and to provide a better and much more humane financial arrangement that will enable the citizens to access health care service without having to pay at the point of service delivery and also ensure an improvement in the quality of basic health care.

The NHIS was established under Act 650 of 2003 by the Government of Ghana to provide basic healthcare services to persons resident in the country through mutual and private health insurance schemes (NHIA Annual report 2013). Act 650 of 2003 has been amended and replaced with the National Health Insurance Act 852 of 2012, to address the inconsistencies and the legal ambiguities in the previous act. The purpose of the amendment was also to cater for the changing developmental trends in the health sector and to solidify the gains made ten years after the implementation of the scheme. The new act recognizes the existence of the District Mutual, Private Mutual and Private Commercial Schemes which are regulated by the National Health Insurance Authority (NHIA Act 852).

Ghana introduced the NHIS as part of a major development policy framework; Ghana Poverty Reduction Strategy (GPRS), implemented in 2003. The aim of the NHIS was to replace the previously unbearable Cash and Carry System of paying for health care at the

point of service and to provide a better and much more humane financial arrangement that will enable the poor to access health care service without having to pay at the point of service delivery. The establishment of the scheme was also to ensure an improvement in the quality of basic health care services for all citizens, especially the poor and vulnerable.

### 1.1.1. The concept of health insurance

Dixon *et al*. (2011) define health insurance as "an arrangement which presents people exposed to the uncertainties of future health shocks an opportunity to contribute to a fund from which they can draw when they are ill". To "insure", as used in this context means to protect one's self against the unexpected, unforeseeable and undesirable future health shocks that adversely affect human well-being. Health insurance offers financial protection to the insured by reducing out-of-pocket payments, and direct user fees or point of service payment for health care, thereby improving access to health care (Chankova *et al*., 2008).

Health insurance can be financed through general taxes or through contributions by the insured and other stakeholders. The latter is often referred to as a social health insurance (SHI) scheme. Financing through general taxes has proven to be more effective and easier to implement in countries which have large formal sectors and a strong tax base, owing to the ease with which revenue through taxes can be mobilized (Chankova *et al*., 2008). In countries where the informal sector dominates, as typical of most countries in South Saharan Africa (SSA), revenue mobilization through taxes could be difficult and limited, making Social Health Insurance (SHI) an easier option. Consequently, this has evolved as a preferred intervention which various countries are using to extend health insurance to the majority of the people in the informal sectors in South Sahara Africa (SSA). Based on the ownership, the kind of benefit provided, the degree of risk pooling and the management of a

health insurance scheme, it could be classified as private non-profit, commercial, a mutual or community-based.

## 1.2. Problem Statement

The National Health Insurance Scheme is a social intervention that replaced the infamous "cash and carry", so as to enable all residents in Ghana to enroll to have access to quality healthcare. However, only 36% of the population is covered after a decade of the scheme's introduction (Oxfam, 2013), implying that universal health coverage (UHC) status has not yet been attained. Consistency and retention in the scheme have also been low, especially among informal sector workers (Agyapong *et al*., 2008) of which Lower Manya Municipality is no exception.

Empirical evidence of the factors affecting health insurance enrolment indicate that age, sex, education, household size, economic wealth and the knowledge of its importance plays an important role in enrolment. Ministry of Health (MoH), Ghana report shown that the poor are less likely to enroll and likely to drop out from membership (MOH, 2014). On the contrary, the rich will enroll and maintain their membership even when they have other sources of financing for their health. The challenges to healthcare financing have become more pressing. In middle and low-income countries, the situation is worsened by the wide socioeconomic inequalities.(Amo-Adjei, Anku, Amo, & Effah, 2016)

The researcher, therefore, wishes to explore the factors that influence enrollment into the scheme in the Lower Manya Krobo Municipality in the Eastern Region of Ghana.

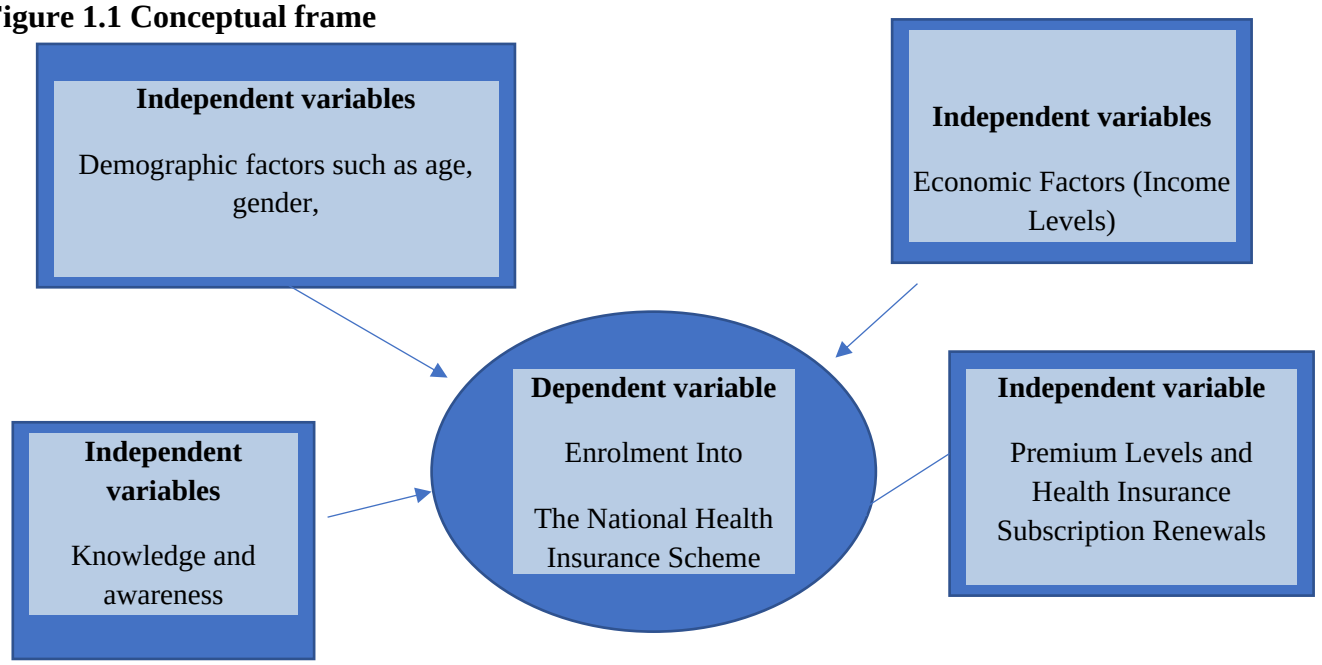
## 1.3. Rationale of the Study

The study findings help in policy formulation especially in the reforming the health insurance scheme to suit the specific needs of the rural communities in Ghana. The study reveals to the stakeholders on impediments to enrolment of health insurance among the population. Key health financing policy makers especially the Ministry of Health and Ghana Health Services may use the findings in setting the premiums, collection mechanisms and benefit packages of the current scheme and the proposed a solid universal health coverage scheme affordable to all. Knowing the level of awareness of health insurance assist in designing of simple health insurance messages and aid in selecting the information dissemination media for marketing health insurance in the mainly rural populations

## 1.4 Conceptual Framework

The conceptual framework of a study is the blueprint or the foundation on which the entire study is based on (Yin, 2003). It gives the researcher a guideline or an outline on how to execute the study. However, it goes beyond the outline since it also enables a particular study to be situated within the wider ambit of empirical literature (Neuman, 2007). The theoretical underpinning or conceptual framework for this study (Figure 1.1). It can be seen as illustrated in Figure 1 that the dependent variable for this study is enrollment into the NHIS while the independent variables are demographic factors, knowledge and awareness, economic factors and premium levels and health insurance subscription renewals.

**Figure 1.1 Conceptual frame**




**Source:** Author's own development

Figure 1.1: Conceptual framework of National Health Insurance Enrolment

## 1.5 Research Questions

The research questions of the study were:

1. What factors influence people enrolment into the NHIS?
2. What are the major factors influencing the renewal of membership in the National Health Insurance Scheme?
3. What are the major causes of delay in enrolment into the scheme?

### 1.6. General objective

The primary objective of the study is to determine the factors that influence enrolment into the National Health Insurance Scheme.

#### 1.6.1 Specific Objectives:

1. To determine the factors associated with enrolment into the National Health Insurance Scheme
2. To assess the major factors that influence renewal of membership into the scheme
3. To explore the major causes of delay of enrolment in to NHIS

### 1.7 Profile of Study Area

The lower Manya Krobo municipal (LMKM) is one of the 26 administrative districts in the Eastern Region of Ghana. The municipality came into existence as a result of the split of the then Manya Krobo District into Lower and Upper Manya Krobo in 2008. It was elevated to a Municipal status in July 2012 by a legislative instrument (L.I) 4026 with Odumase Krobo as its capital.

The Municipality is strategically located at the Eastern corner of the Eastern Region of Ghana and lies between latitudes -6.2 -6.5 N and Longitudes -3.0 -0.0W of the Greenwich Meridian with an altitude of 457.5m. The municipality is bounded on the North-West by Upper Manya Krobo District, on the North-East by Asuogyaman District, on the South-East by North-Tongu District and on the South by Yilo and Dangme West District. The LMKM covers an area of 591 square kilometers constituting about 3.28% of the total land area of the Eastern region of Ghana (18,310km).

According to the 2010 population and housing census, the total population of the municipality is 89,246 which represents 3.4 percent of the total population of Eastern Region. The total Population consists of 41,470 males (46.5%) and 47,776 females (53.5%).

The people of Lower Manya Krobo Municipality are mainly farmers and traders. Cereals (Maize) is the most common agricultural product found in the Municipality together with, cassava, pepper, pineapple, watermelon, sweet potatoes, plantain, yam, cocoayam, okra, tomatoes, and others. Mangoes are also produced for export as well as for local consumption. A section of the population especially the men folk also earn their living through fishing on the Volta lake which lies at the north-Eastern part of the municipality. The municipality is endowed with natural resources such as limestone and the Agomanya Market which forms the commercial centre of the municipality.

## 1.8 Scope of the Study

This study focused exclusively on the factors that influence enrolment into the National Health Insurance Scheme in the Lower Manya-Krobo Municipality in the Eastern Region of Ghana.

## 1.9 Organization of Report

This thesis consists of six chapters. Chapter one entails the introduction which includes the background information, problem statement, rationale of the study, conceptual framework, research questions, general objectives, specific objectives, the profile of the study area and the scope of the study. Chapter two contains the literature review where the various theories on health insurance were presented. Chapter three entails the research design, the data collection techniques and tools, study population, study variables, sampling, pre-testing, data handling, data analysis, ethical consideration and limitations. Chapter four presents the results of the data analysis and background information. Chapter five presents the discussion and implications of the study's findings while chapter six presents the summary, conclusio, and recommendations.

# CHAPTER TWO

# 2.0 LITERATURE REVIEW

## 2.1 Introduction

This chapter sought to review the literature on the subject matter of the study. This chapter specifically defined the general concept of insurance, the various types of insurance, health insurance, health insurance enrollment, the demographic characteristics of enrollees, the relationship between factors influencing health insurance enrollment and the development of the conceptual framework of the study.

## 2.2 The Concept of Insurance

Insurance has been variously defined by different authors, companies, and institutions. However, the basic underlining principle and concept of insurance is the concept of indemnity where those who suffer losses are reinstated to their previous positions before the losses or loss occurred (Redja, 2011; Vaughan & Vaughan, 2008; Ross, Westerfield, Jaffe & Jordan, 2009; Pal, Bolda & Garg, 2007). For instance, Redja (2011), has described insurance as being the pooling of losses through the transfer of risks of similar nature to insurance firms.

This definition contains the essential elements of insurance such as people having similar risks joining forces and pooling risks with the belief that not all of them will suffer the same loss at the same time. This definition also brings to the fore the issue of indemnity and the payment of benefits to insured that suffer losses. This definition further talks about the

transfer and assumption of risk by the insurance company with the promise of indemnifying insured with the occurrence of the risks insured against. As pointed out by Redja (2011), indemnity is not to enrich the customers but to reinstate them to their position in which they were prior to the lost.

Pal (2007), has defined insurance as the fair, equitable and unbiased transfer of the risk of a loss from one entity (insured) to another (insurer) in exchange for a premium and can also be seen as a guarantee where insured incurs only small losses with the intention of preventing serious and more disastrous losses. Even though this definition is lengthy, it essentially captures all the elements of insurance. It talks about fairness and equity from the perspective of both insurers and insured because insured or customers pay premiums which is usually a small percentage of the total value of the sum insured in exchange for cover and projection against potential big losses in the future (Anderson & Mellor, 2008).

Similarly, Yadav *et al.,* (2013), have described insurance as protection and strong defense against economic loss that may occur as a result of unanticipated events. This definition looks at insurance from the potential economic loss that a person or a firm or an organization may suffer from failing to buy insurance. This definition is more interested in the economic losses even though insurance is not only about economic losses but the realization of peace of mind, security and confidence (Ross *et al*. 2009; Pal *et al*., 2007). Insurance has also been defined by Tyagi and Tyagi (2007), as a contract and agreement between two parties where one party (insurer) due to the premium paid to it/him and commensurate with the risk, serves a protection to the other party (insured) by making sure that the insured does not suffer loss, damage or any other mishap.

All the definitions also point to insurance offering protection and security against unfortunate events or mishaps and that insurance is associated with transferring one entity's risk to another. Insurance can also be seen as a process where risks are pooled, shared and spread with other people in the risk category. These definitions also bring out the fact that people or a group confronted with similar risks can pool their resources together or come together through the pooling of funds to cater for group members that may suffer losses (Tena, 2009).

### 2.1.1 Health Insurance

Health insurance is a type of a common fund or pool where members of these funds use the funds to address and meet their healthcare cost as and when needed (Kituku & Amata, 2016). The concept of health insurance was first developed by Pauly (1968), who opined that economists looked at moral hazard from a negative position because the provision of health care services and spending by insurance illustrates a welfare loss to the particular society. Pauly (1968), was again of the view that insurance decreases the cost of health care to almost zero and therefore resulting in health insurance clients buying more health care services than they ordinarily would have purchased at normal prices. In effect, health insurance provides higher value to clients than the market price.

The difference between the rather high cost of the resources employed by service providers to produce quality health care is indicated in the high market price and its low value to customers are indicated in low insurance price. This clearly shows inefficiency. According to Pauly (1968), the theory of health insurance provides effective policy solution to this issue of moral hazard through the imposition of coinsurance payments, and capitations to

increase the price of medical care to clients and also eliminate or reduce the inefficient expenditures.

### 2.1.2 Importance of Health Insurance

Health insurance has been shown to be an important health financing mechanism in improving access to healthcare services and providing financial risk protection (Annear *et al*, 2006).

Furthermore, there is a global call for countries to move towards universal health coverage (UHC) through sustainable health financing. UHC has become an important target of the Sustainable Development Goals (SDGs).UHC aims to increase equity in access to quality healthcare services and reduce associated financial risk (Aregbeshola, 2017). According to the World Bank and the World Health Organization (WHO, 2017), at least half of the world's population still lacks access to essential health services.

When a person experiences a bad shock to health, their medical expenses typically rise and their contribution to household income and home production (e.g. cooking or childcare) declines (Wagstaff & Doorslaer, 2003). According to the WHO (2007), each year, approximately 150 million people experience *financial catastrophe*, meaning they are obliged to spend on health care more than 40%of the income available to them after meeting their basic needs.

Low income and high medical expenses can also lead to debt, the sale of assets, and removal of children from school, especially in poor nations. A short-term health shock can thus contribute to long-term poverty (Van Damme *et al.*, 2004;). At the same time, because households often cannot borrow easily, they may instead forego high-value care. When they

do access care it will often be of low quality, which can lead to poor health outcomes (Das *et al.*, 2008; Jütting, 2004). Theory suggests that health insurance can address some of these problems (Mhere, 2013), by covering the cost of care after a health shock, insurance can help to smooth consumption, reduce asset sales and new debt, increase the quantity and quality of care sought, and can improve health outcomes.

## 2.2 Underlying Theories of Health Insurance

This section reviewed and presented the theories underpinning health insurance.

### 2.2.1 The Theory of Endowment Effect

This theory holds that typical households will take decisions based on their risk hatred especially in relation to something new and where they often have no clue (Schneider, 2004). This theory operates on the assumption that people will want to look before they leap especially when they perceive the decision, they are taking is highly risky and the outcome still unknown. According to Schneider (2004), individuals tend to perceive higher costs in giving up something as compared to the benefits of getting something new. This in effect means that households would rather stay with what they know even though it may be more expensive that venture into the unknown even when it may be more beneficial to them. With respect to insurance, typical households will only purchase insurance when they calculate and realize that the benefits far outweigh the cost of not getting the insurance. In brief, the endowment theory is of the assumption that to replace an old thing with a new depends on how promising the new one is compared to the old one. In this vein, opting for insurance depends upon the extent to which it gives a better alternative to out-of-pocket payment (Aregbeshola, 2017).

### 2.2.2 The Theory of Moral Hazard

The conventional and traditional theory of health insurance demand holds that naturally most individuals are risk averse and to avert any undesirable consequences in the future, people do not hesitate in making small contributions of payments against any health care eventuality. This is more so when medical bills can be so high and where premiums paid by insured to access health care needs is just a fraction of what they would have paid based on prevailing market rates (Mhere, 2013).

According to Kituku and Amata (2016), health insurance exists to eliminate the risk arising from unanticipated sudden illnesses and accidents which may disrupt household financial plans because the cost of receiving medical care by paying out of pocket is very high and often out of reach of the poor. This unfortunately often results in the deaths of household members (Mhere, 2013). The need to, therefore, avoid unanticipated hardships and challenges when sickness strikes are one of the main reasons for the uptake of health insurance program. Certain individuals see health insurances as a utility model where they enroll to obtain income transfer which they gain when they fall sick and having to fall on the pool. This means that there is a moral hazard associated with health insurance in the sense that certain individuals over subscribe or over-utilize health services. This is one of the reasons why national health insurance scheme beneficiaries tend to increase their visitations to the hospitals with the slightest of excuses. They do so to derive maximum benefits from the premiums they have paid to the detriment of genuine sick persons.

### 2.2.3 Theory of Adverse Selection

Another health insurance uptake issue has to do with the issue of adverse selection where enrollment onto health insurance schemes is usually skewed in favour of people prone to sickness. This means that such category of people tends to over-utilize the health insurance scheme to such an extent that they barely leave anything for operators to run the scheme profitably (Schneider, 2004). This again means that individuals who realize that their income level may not be enough to help in times of sickness to any household member, flock to purchase health insurance-related products and services. As pointed out by Boateng *et al*. (2013), national health insurance schemes are pro-poor programmes and therefore highly subsidized to encourage massive enrollment by the target group (the destitute in society).

## 2. 3 The Demographic Characteristics of Health Insurance Enrollees

Demographic factors such as age, sex, educational background, marital status, and household size strongly influence health insurance uptake and this section of the chapter reviewed the literature on the demographic factors affecting health insurance subscription.

### 2.3.1 Gender and Health Insurance Uptake

The gender of people tends to affect their health insurance enrollment (Boateng and Awunyo-Victor, 2013; WHO, 2008). Generally, males tend to subscribe to health insurance more than females because males tend to be more educated and have the ability (money) to purchase health insurance than women who are usually less educated, poor and highly dependent on their spouses for key decisions such as the purchase of health insurance

(WHO, 2008). According to Cerceau (2012), women are highly discriminated against because they are voiceless when it comes to decision making within homes.

Women have less access to health care and health insurance and this is often because they do not have the capacity to unilaterally take decisions on health-related issues in their households. This is the preserve of men who tend to be the heads and therefore have the final say in how health insurance and health-related issues are executed. Cerceau (2012) found that the percentage of health insurance enrollment among males tend to be higher (60%) as compared to 40% by women. According to Cerceau (2012), this figure is attributed to the low positions that Indian women occupy in society and for which they are barred from taking key decisions such as the enrollment in health insurance schemes.

It was also found by Cerceau (2012) that women in India do not highly subscribe health insurance because they have low educational background and that they equally do not have sufficient information on health insurance products and services and therefore continue to depend on their spouses for information and decision making. On the contrary, Boateng, and Awunyo-Victor (2013), found in their study that gender plays a key role in health insurance subscription in the Volta region and that women tend to renew their health insurance policies than their male counterparts. According to Boateng and Awunyo-Victor (2013), women tend to enroll and renew their health insurance policies quite often because their natural roles as care givers, mothers, and their genetic make-up tend to influence them to regularly renew their insurance policies.

### 2.3.2 The Influence of Age on Health Insurance Uptake

The age of people to a large extent determines their uptake of health insurance (Mhere, 2013; Harmon and Finn, 2006; Bhat & Jain, 2006). The reason for this has been attributed to matured people appreciating the importance of insuring their lives against unexpected diseases and illnesses which could have dire consequences on their households as compared to the young who think they are healthy and strong and therefore not as inclined to subscribe to health insurance (Eward, 2009; Chankova *et al.*, 2009).

According to Mhere (2013), people tend to seek health insurance as they age and become more responsible and they will normally do all it takes to live long to enjoy their acquired properties and also take care of their children. Thus, health insurance uptake tends to be higher among the aged and matured than among the young and less experienced segment of a given population (Abayomi, 2012). Edward (2009), embarked on a study to determine the subscription of health insurance among Ghanaian women and found that women over and above age forty were more likely to subscribe to national health insurance as compared to those below forty.

According to Edward (2009), the reason for this is that people far advanced in age tend to experience more health-related issues all things being equal as compared to the young. This natural phenomenon, therefore, pushes the aged to invest more in their health including buying health insurance. Bhat and Jain (2006) investigated the factors affecting the uptake of health insurance among low- and middle-income groups in India and found that the age of respondents determines their uptake of health insurance. The authors found that it must, however, be pointed out that the very rich do not subscribe to health insurance because they

have the capacity to cater for their health bills out of pocket and do not care for health insurance which may be restrictive in terms of what is accessible (Mhere, 2013).

### 2.3.3 Marital Status and Size of Household and Health Insurance Uptake

The marital status of people has been found to also significantly influence their enrollment with health insurance (Fang *et al*., 2012; Bourne & Maureen, 2010). According to Kirigia *et al*. (2005), married people with large households tend to have higher inclination to invest in health care related issues including health insurance than people that have not married and or have smaller households. This is because there is the need to rely on health insurance within large households since their medical bills tend to be higher. Again, the need to protect and safeguard their families against unplanned health bills pushes large households to buy health insurance.

Bourne and Maureen (2010), in their study found that social status, income levels, marital status, retirement benefits and standards of living all influence health insurance enrollment in Jamaica. The study by Doyle and Panda to determine the factors influencing households to buy health insurance in India concluded that the bigger the household, the more likely that they will subscribe to health insurance policies. Similarly, Savage *et al*. (2008) sought to identify the effect of family structure and children on health insurance subscription decisions in Australia. The authors established that women who intend having more children tend to buy health insurance more than women who have the number of children they need already. According to the authors, needing more children in the future increases the likelihood of purchasing health insurance by three percent.

### 2.3.4 Educational Background and Health Insurance Enrollment

Educational background of people tends to play a major role in their subscription and uptake of health insurance (Mhere, 2013). This is because education increases the ability of people to understand how health insurance operates and what they stand to gain by enrolling (Ensor and Cooper, 2004). For instance, Mhere (2013), embarked on a study to find out the participation of health insurance programmes in Zimbabwe. The author found that the longer people stay in school, the higher their appreciation and understanding of health insurance and its benefits and therefore, the higher the probability that they will enroll or join other health insurance schemes.

Bending and Arun (2011), sought to determine the factors influencing the uptake of health insurance and microfinance products in Sri Lanka. The authors established that households with uneducated or less educated heads tend to participate more in national health insurance schemes because their lower levels of education do not earn them much by way of income and therefore necessitating them to insure the families since national health insurance schemes are perceived to be quite less expensive to participate in. Ghosh (2013) investigated the awareness and willingness of people to pay for health insurance in India and it was found by the author that educated people tend to participate less in national health insurance because they are able to buy private insurance and engage the services of more expensive health care providers because of their higher income levels as compared to the poor who can barely pay for national health insurance premiums.

Akwesi and Joshua (2013), investigated the ownership of health insurance enrollment among Ghanaian women by comparing women from different parts of the country (northern territories, central and coastal areas). The study found that socio-economic and demographic

factors play a critical part in the subscription and uptake of national health insurance. It was specifically found by the authors that women with highly educated spouses and partners tend to purchase health insurance more than those with partners who are less educated.

## 2.4 The Major Factors that Influence Delayed and Renewal of Enrolment

This section reviewed the literature on other factors that impede the renewal of health insurance by subscribers.

### 2.4.1 The Influence of Awareness and Knowledge on health Insurance Enrollment

One of the factors influencing and, in some cases, impeding health insurance adoption and subscription stems from the low awareness of the availability, accessibility, benefits, and operations of health insurance schemes (Ghosh, 2013). Insurance naturally is a highly sophisticated and complex subject and it usually requires some level of education to understand how insurance works (Platteau and Ontiveros, 2013). According to Ombeline and Gelade (2012), health insurance is a relatively new phenomenon and concept especially in developing countries where the premium is paid in exchange for uncertain payout in future (Ombeline & Gelade, 2012).

According to Churchil and Cohen (2006), health insurance is so new to some people that they expect to get their premiums back when they do not put in any claim throughout the year and therefore underlining the ignorance of certain people when it comes to the operations of health insurance. Gina and Sapna (2008) sought to examine the challenges of implementing insurance schemes and program among the informal sectors of developing

countries. The study revealed that trust is highly important; in building trust among target communities so as to convince the locals to enroll.

According to Gina and Sapna (2008), past experiences where insurance firms failed to leave up to expectation and where certain insurance firms failed to pay claims of clients eroded all trust with insurance firms. Thus, the establishment of health insurance schemes was seen as another scheme to collect premiums but not pay any claims (Platteau and Ontiveros, 2013). Mathauer *et al*. (2008) investigated the factors impeding the adoption and utilization of health insurance schemes and it was revealed that insufficient knowledge and awareness about the operations of health insurance, its benefits, enrollment procedures and the general lack of the appreciation of principles of insurance makes it difficult to increase health insurance enrollment in developing countries.

It has also been found by Churchil & Cohen (2006), that poor marketing of health insurance products and services is another challenge confronting operator because of past negative experiences. Moreover, the poor do not understand why they must put aside money for future health insurances needs when they are unable to currently take care of the households (Ghosh, 2013). Platteau and Ontiveros (2013), investigated the factors impeding health insurance enrollment and renewals in India and found that low uptake and low renewal rates were as a result of low information and marketing of the features and benefits of health insurance schemes coupled with the general low knowledge about the principle of insurance. Jangati (2012), revealed that health insurance enrollment among Pakistanis is low because 65.5% of the respondents claimed they have no idea or knowledge about health insurance, 22% of the males claimed being aware and with 11.5% of the females claiming some knowledge about health insurance.

While it is assumed that consumers make informed choices based on the cost and quality of competing health plans, research has documented that many consumers are overwhelmed by health insurance plan options and that consumers are not confident in their ability to choose (Quincy, 2011a). To make health insurance decisions, consumers need clarity of financial aspects of available plans; reliable and easy-to-understand information; an effective way to navigate through the myriad options available to them in the health insurance marketplace; and sources they can trust (Mhere, 2013).

Again, the type and quality of sources of information are likely to contribute to decision making. Farley Short *et al*. (2002) found that most consumers prefer two or three sources of information from the following ranked highest to lowest: (i) health plan sponsors (employers); (ii) health insurance companies; (iii) family or friends; and (iv) medical doctors.

Research has shown that consumers are cautious about the information they receive from employers and health insurance companies. Consumers are concerned that information sources will attempt to coerce them into "bottom-line friendly" policies rather than to policies which are best for their situation (Hibbard *et al*., 2002). In contrast, information provided by physicians was often looked upon favorably (Walsh *et al*., 2011).

Hibbard *et al*. (2002), found that consumers perform well when given a tool that presents information in a simple format that allows them to compare plan aspects without viewing unneeded or cluttered information. Plan summaries highlighting specifics were found to improve consumer performance (Wroblewski, 2007). Consumers do not perform well when given too many choices in the health insurance marketplace (Hanoch& Rice, 2011).

### 2.4.2 Economic Factors (Income Levels)

Health insurance certainly is not for free and subscribers are required to pay premiums which could be monthly, quarterly or yearly (Sarpong *et al*. 2010; Bennet *et al*. 1997). Unfortunately, it is usually when subscribers are to renew their subscriptions that challenges are encountered especially by poor households. It has been variously established that the uptake of health insurance by the poor is rather low even though they are the most vulnerable when it comes to the provision of health care to their households (Mitulla, 2003). The poor often do not have the means of paying for health insurance simply because their financial circumstances are such that they are always feeding from hand to mouth and do not, therefore, have any reserves to even cater for health insurance premiums even though the premiums are far less expensive than paying out of pocket when a household member falls sick.

Kirigia *et al*. (2005), investigated the relationship between economic and demographic factors on health insurance uptake in South Africa had established that the percentage of respondents who subscribe to health insurance increases as the size of the household income increases and therefore implying that macro-economic variables lead to higher disposable incomes which ultimately encourages higher health insurance subscriptions.

Similarly, Bhat and Jain (2006), established in their study that the middle-income bracket tends to purchase private insurance while the low-income group tends to subscribe to national health insurance schemes. Sarpong *et al*. (2010), explored the socio-economic levels and health insurance enrollment in Ghana where socio-economic variables were water supply, access to electricity and nature of dwellings. It was revealed that only twenty-one percent of the households deemed as poor enrolled with the national health insurance as

compared to sixty percent who are characterized as being from the middle class. In the same vein, Dalaba *et al*. (2012) and Ebenezar &Anthony (2014), established that the middle-income bracket in Ghana is more inclined to purchase health insurance than the low-income group.

### 2.4.3 Challenges of Informal Economies

It has been found that the higher the informal nature of an economy, the more difficult it is for health insurance subscribers to pay their premiums (Sudharshan & Sethuraman, 2001). Even though health insurance is meant to alleviate the burden of footing medical bills of households, some burden is still imposed on households in the form of premium. This premium even though usually less expensive for national health insurance schemes are still found to be too high for the informal sector and poorer homes. Bennet *et al*. (1997), investigated and analyzed about 82 health insurance programmes in both advanced and developing countries and observed that health insurance providers and planners find it difficult receiving premiums from the informal sector. According to the authors, receiving premiums from the informal sector which dominates economies of developing countries is very challenging because the incomes of people operating in the informal sector are not reliable and consistent.

Moreover, small-holder farmers tend to experience premium payment challenges because of the seasonality of their incomes and liquidity. Similarly, Perry and Rosen (2001), investigated the low health insurance subscription levels among self-employed people as compared to salary earners in the United States of America and it was established by the authors that self-employed people and those in the informal sector were less inclined to purchase health insurance as compared to wage earners. The study specifically found that

whereas 74.1% of wage earners subscribed to health insurance, only 51.4% of self-employed people subscribed to health insurance.

### 2.4.4 Premium Levels and Health Insurance Subscription Renewals

Insurance program usually requires subscribers to pay premiums which could be one-off or periodic payments to the health insurance operators so as to facilitate the creation of a health insurance pool that covers both administrative and claims expenditures. According to Hsiao & Shaw (2007), the challenge confronting health insurance operators is the need to set up insurance premium that is affordable and meets the pockets of the poor, vulnerable in society and the destitute. Gina *et al*. (2012), established that the execution of health insurance schemes in Sub-Saharan Africa and Asia is fraught with premium collection challenges because of the often high administrative and management costs which tend to discourage subscribers from further enrollment.

A study by Asuming (2013), sought to identify the degree to which factors such as premiums payment, incomplete information, and remoteness affect health insurance enrollment at Wa in the Upper West Region of Ghana. The study among other things revealed that the provision of 33% subsidy on premiums led to 200% increment in health insurance renewals and enrollments. This study, therefore, suggests that lower premiums translate into higher health insurance enrollment all things being equal. It was equally established by Freeman & Zang (2011), that lower premiums in the Akatsi District of the Volta Region of Ghana result in higher renewal rates and that high premiums are a major barrier to the enrollment of new health insurance subscribers.

## 2.5 The Relationship between Factors Influencing Health Insurance Enrolment

Aregbeshola & Khan (2018), examined the predictors of enrolment in the NHIS among women of reproductive age in Nigeria. Secondary data from the 2013 Nigeria Demographic and Health

Survey (NDHS) were utilized to examine factors influencing enrolment in the NHIS among women of reproductive age (n=38948) in Nigeria. Demographic and socio-economic characteristics of women were determined using univariate, bivariate and multivariate analyses. Data analysis was performed using STATA version 12 software. The authors found that 97.9% of women were not covered by health insurance. Multivariate analysis indicated that factors such as age, education, geo-political zone, socio-economic status (SES), and employment status were significant predictors of enrolment in the NHIS among women of reproductive age. The study concludes that health insurance coverage among women of reproductive age in Nigeria is very low. Additionally, demographic and socio-economic factors were associated with enrolment in the NHIS among women. Therefore, policy-makers need to establish a tax-based health financing mechanism targeted at women who are young, uneducated, from poorest households, unemployed and working in the informal sector of the economy. Extending health insurance coverage to women from poor households and those who work in the informal sector through a tax-financed non-contributory health insurance scheme would accelerate progress towards universal health coverage (UHC).

Kituku and Amata (2016), investigated the major determinants of uptake of medical insurance with Kenya's National Health Insurance Fund by using descriptive survey design. The study collected data from 150 employees in the informal sector. It was revealed that the major determinants of uptake of medical insurance are the level of income, awareness of the NHIF benefits, access to NHIF outlets and the premium payable by members. It was further revealed that factors such as the gender of the head of households, educational level, size of the household, age and marital status had an impact on enrollment.

Kinyua (2013), investigated the effect of demographic factors (educational level, socio-cultural factors, and income levels) on the enrollment of community-based health financing program in Kenya. Data was collected from 372 individuals using both closed and open-ended questions. It was established by Kinyua (2013), that factors such as educational level, socio-cultural factors and income levels all have strong and positive effects on health insurance uptake.

According to Mathauer (2008), one of the main challenges of health insurance uptake especially in developing economies has to do with low awareness of the operations and benefits of health insurance program. This challenge is usually occasioned by the apparent lack of adequate communications and effective marketing by operators. This implies that the marketing and communications strategies of most health insurance schemes are highly ineffective and fail to reach intended targets. Another factor leading to low enrollment has to do with the perception that health insurance is a statutory deduction which has no instant benefit to contributors and therefore resulting in low uptakes (Bawa, 2011).

Laura (2013) investigated factors impeding access to the National Health Insurance for the informal sector workers. This study used the desktop approach by reviewing existing

literature on the NHIS. The author established that the main factors hampering access to health insurance in Ghana's informal sector are the high cost of premiums, poor administration and management of the NHIS at the district level and the insufficient engagement and involvement of the informal sector in the design and implementation of the NHIS in Ghana.

# CHAPTER THREE

# METHODOLOGY

## 3.0 Introduction

This chapter presents the methodological approaches used in operationalizing the study objectives. These include the study area, the research design, the sampling techniques, sources of data, target population, sampling technique, data collection instrument, the data collection procedure, and data analysis.

## 3.1 Study Area

The study was conducted in the Lower Manya Krobo Municipality which is located in the Eastern Region of the Republic of Ghana (Figure 3.1). The Municipality is divided into six sub-municipalities namely: Akuse, Odumase, Kpong, Agormanya, Asitey, and Oborpa. The Municipality has a total of 28 health facilities comprising of Hospitals, Health Centres, Maternity Home, and CHPS Zone. The Municipality shares boundaries with Upper Manya Krobo District to the north, to the south and west with Dangme West District and Yilo Krobo Municipality respectively, and finally to the east with Asuogyaman District (Lower Many Krobo Municipal Health Directorate, Annual Report, 2017). Major economic activities in the municipality include farming, commerce, public and civil services.

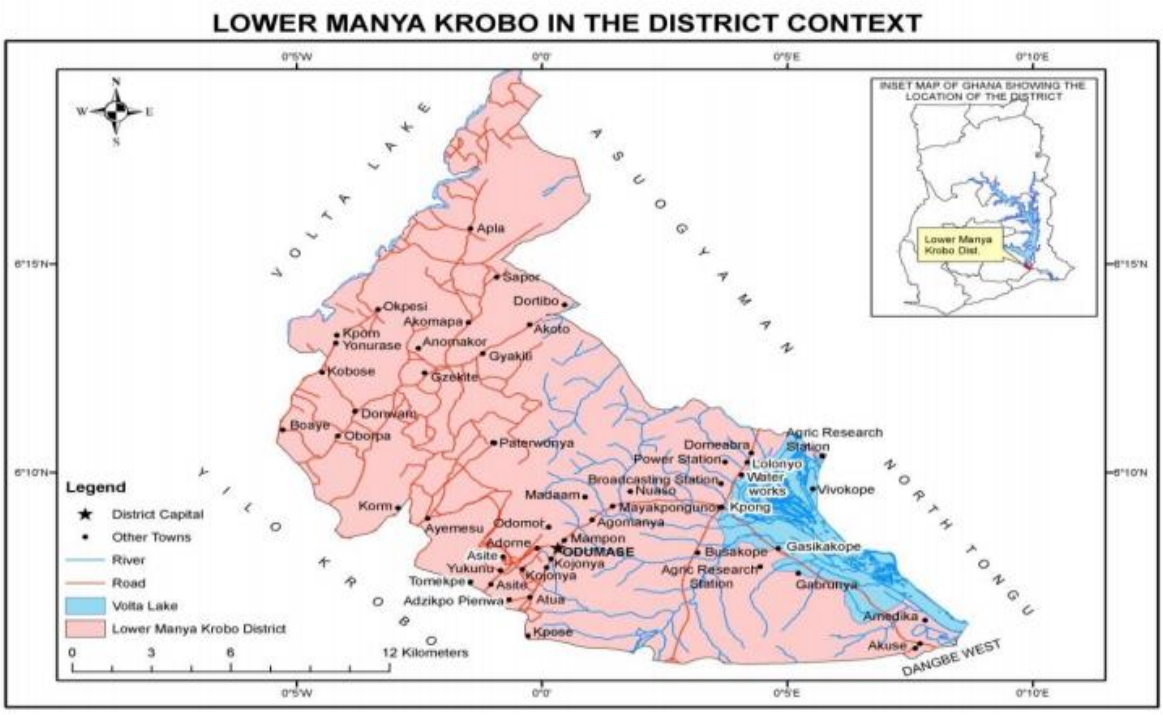



**Figure 3.1:** Map of Lower Manya Krobo District **Source:** www.statsghana.gov.gh

## 3.2 Research Design

For every study to be successful, it must have a research design because it is the blueprint that facilitates and guides how the entire study will be organized (Yin, 2003). This study employed the cross-sectional design with quantitative data collection approach, where data were collected within a specific point in time.

## 3.3 Study Population

The target population of a study is the particular segment of the general population deemed to possess the information required by the study and from which therefore data or information is elicited (Yin, 2003). For this study, therefore, the target population entailed both insured and non-insured members from ages 18 and above. The age restriction was introduced because purchasing health insurance is possible only when is more than 18 years of age. Those below age 18 years are deemed dependants. Such persons depend on their parents' or guardians' health insurance policies. The target population also included residents of the Lower Manya Krobo Municipality who visited any of the five selected health facilities to access health care between December 2018 and February 2019. The exclusion criteria were for individuals who had not met the above descriptions.

### 3.3.1 Inclusion Criteria

- People living in the Lower Manya Krobo Munnicipality
- Those aged 18 years and above
- Those who gave consentto participate

### 3.3.2 Exclusion criteria

- Children who were below the age of 18
- Those who decline to give consent to participate in the study

## 3.4 Study Variables

The study variables included data gathered on the prevailing insurance status of the respondents at the time of the study, demographic characteristics of the respondents and potential variables that were attributable as factors to enrollment into the NHIS.

### 3.4.1 Independent variables

- Gender
- Age
- Marital Status and Size of Household
- Educational Background
- Knowledge and awareness
- Accessibility

### 3.4.2 Dependent variables

- Health insurance enrollment

## 3.5 Sampling Technique

Having identified the study population, the next stage of the study focused on how data were collected from this target population. Sampling has to do with how the researcher collects data from the target population in a manner that ensures that all members of the target population have fair chance of represention. Representation is key because data must be collected from all categories of health insurance users to facilitate the drawing of valid conclusions. The researcher, therefore, used the convenient sampling technique to collect data from the target population. The convenient sampling technique was used because it was deemed to be most suitable in terms of easy access to the respondents, cheaper to execute and also not time-consuming.

### 3.5.1 Sample Size

The projected sample size for the study was 329 respondents. This figure comprised both the insured and non-card bearing members of NHIS (un-insureds). The sample size of 329 was arrived at by employing a 31% enrollment coverage of the NHIS in the Municipality (Lower Manya Krobo Municipality Report, 2017). Cochran's formula for calculating sample size was employed. A confidence interval of 95% and a margin of error of 5% was chosen. The formula used in calculating the sample size is as illustrated below:

$$n = \left[z^2 \times \frac{pq}{e^2}\right]$$

$$n = \left[1.96^2 \times \frac{0.31 \times 0.69}{0.05^2}\right] = 329$$

Where:

n = Required sample size

p = Prevalence of NHIS enrolment

z = Z-score at 95% confidence interval

e = Margin of error

A 10% non-respondent rate was added bringing the total number to 362

## 3.6 Data collection procedure

A self-administered data collection instrument was used to gather the required data. This was used due to its cost-effectiveness and the flexibility for the research team to collect data from the respondents quickly. It also enabled the team to collect data from multiple respondents at the same time. The questionnaire was mostly closed-ended to facilitate easy completion considering that some of the respondents were patients who have come to the

health facilities to seek care and there was, therefore, no need to encumber them with such long engagements.

### 3.6.1 Sources of Data

This study mainly used primary data sources in collecting the appropriate data for the study. The primary data sources were obtained through the development and administration of self-administered survey questionnaires.

## 3.6 Pre- Testing

The researcher obtained the services of two extra Field Assistants who were trained on the nature of the study, confidentiality, voluntary participation and the best ways on how to collect the needed data was emphasized.

A pilot test of the questionnaires was randomly conducted on ten (10) patients at the Atua Governmental Hospital. The essence of the pilot-testing was to ensure that respondents would not encounter issues when completing the actual questionnaires. The pilot-testing was beneficial since it enabled the study to identify and correct areas that respondents did not understand how to provide answers on. It also allowed the researcher to have a fair idea of the average time to complete the questions. This led to the elimination of certain questions which were found to be ambiguous.

### 3.7 Data Processing and Analysis

Data analysis is a process for obtaining raw data and converting it into information useful for decision-making by users. Data are collected and analyzed to answer questions, test hypotheses or disprove theories.

Data collected were entered using Microsoft Excel and merged to ensure that data is confidential. The numerically coded data was exported to STATA statistical software (*StataCorp.2007. Stata Statistical Software. Release 14. StataCorp LP, College Station, TX, USA*) for analysis. The study employed descriptive statistics presentations including the use of pie charts, percentages and frequency tables, cross-tabulations, and predictive models to determine the factors that influence the enrollment into the NHIS.

### 3.8 Ethical Considerations

Research ethics can be referred to as the conduct of researchers, their duties and responsibilities to the participants of the research such as sponsors, informants and the general public (O'Connell-Davidson and Leyder, 2010). Research work revolves around ethical considerations. From the choice of a research topic, through to making decisions about which method and techniques to use, who to involve in the research and how to relate to participants of the research, ethics should be an issue of concern (Hay, 2010; Bryman, 2012). The main ethical issues which are usually addressed in research revolve around privacy, confidentiality, informed consent, deception and harm (Matthews and Ross, 2010). Permission to conduct this study was considered with the aid of a consent form and informed consent information. The research team members also introduced themselves to respondents prior to asking them to respond to the questionnaire.

Ethical approval was obtained from the Ensign College of Public Health Ethics Review Board. Participants were selected based on their willingness to partake in the study and signed individual informed consent was sought from each participant before enrolment into the study. Participants were told about their rights to withdraw from the study at any point without any form of coercion since the response to the questionnaire was voluntary.

Anonymity was assured and no personal information that could be traced to a respondent was used in any part of the report. No compensation was given to respondents.

### 3.9 Limitations of the Study

The major challenge in collecting data from the respondents had to do with the refusal of certain people to participate in the study. Again, the findings of this study and the conclusion drawn cannot lead to a generalization since the study focused on only one district in the country. Be as it may, the findings of the study to a large extent shed light on the nexus between the variables.

### 3.10 Assumptions of the Study

The major assumption employed by the study was that all respondents understood the questions posed and that the responses provided by them were truthful, accurate and valid.

# CHAPTER 4

# 4.0 RESULTS

## 4.1 Introduction

This chapter presents the results and interpretations of the findings from the study. The results are presented in tables and graphs, showing percentages and frequencies. Further analysis provided descriptive and inferential statistics as well as tests for statistical significance between the outcome variable and selected covariates. This chapter begins with a presentation of the demographic characteristics of the study population who were mainly household representatives. The results presented here are based on the analysis of 362 valid questionnaires obtained from participants.

## 4.2 Demographic characteristics of the participants

The average age of respondents was 33.8 years with the age range spanning from 18 to 79 years old. Aside, other demographic variables were also studied. A detailed presentation on the demographic profile can be found in Table 4.1.

**Table 4.1:** Demographic characteristics of the participants

| **Variables (N=362)** | **Categories** | **n (%)** |
|---|---|---|
| Age –group (years) | 18-30 | 202 (55.8) |
| | 31-50 | 99 (27.4) |
| | 51-69 | 47 (13.0) |
| | 70+ | 14 (3.9) |
| Gender | Male | 126 (34.8) |
| | Female | 236 (65.2) |
| Employment Status | Self-employed | 178 (49.2) |
| | Public | 22 (6.1) |
| | Private | 74 (20.4) |
| | Unemployed | 88 (24.3) |
| Level of Education | No education | 56 (15.5) |
| | Primary/Middle/JHS | 166 (45.0) |
| | S.H.S/Tech/Voc | 120 (33.2) |
| | Tertiary | 20 (5.52) |
| Income (n=274) | < GH¢100 | 73 (20.2) |
| | GHC100-200 | 154 (42.5) |
| | GHC200 and above | 47 (13.0) |
| | No income | 88 (24.3) |
| Marital Status | Single | 98 (27.1) |
| | Married | 136 (37.6) |
| | Co-habiting | 108 (29.8) |
| | Divorced/widowed | 20 (5.5) |
| Religion | Christianity | 346 (95.6) |
| | Islam | 12 (3.3) |
| | Traditional | 4 (1.1) |
| Ethnicity | Krobo | 272 (75.1) |
| | Ewe | 40 (11.1) |
| | Akan | 17 (4.7) |
| | Others | 33 (9.1) |

**Source:** *Field data*

Table 4.1 provides details on the demographic characteristics of respondents interviewed. Most of the respondents were between the age of 18 and 30 years (56%) and constituted

more than half of the total respondents. Those above 31 years and less than 70 years formed the second majority (40%). The least age group were those above the age of 70 years old.

Compared to males, female respondents were more than 30% higher. In terms of education, it was found that majority of them had basic and secondary education, 45% and 33% respectively with only about 6% attaining tertiary education. However, about 16% of the respondents had no formal education at the time of the study. Public and private sector employees formed 27% and those unemployed also constituted 24%.

The marital status of respondents showed that the majority were either married or cohabiting (27% and 38% respectively). Those who were not married (single) or have been divorced formed 33%. Almost all of the respondents were Christians (96%) and less than 5% were Muslims and traditionalist (Table 4.1).

### 4.3 Awareness and enrolment into the NHIS

This section provides the results on respondents' awareness of the National Health Insurance Scheme. Information on enrolment into the NHIS is also provided in Table 4.2. Responses are provided in frequencies and percentages.

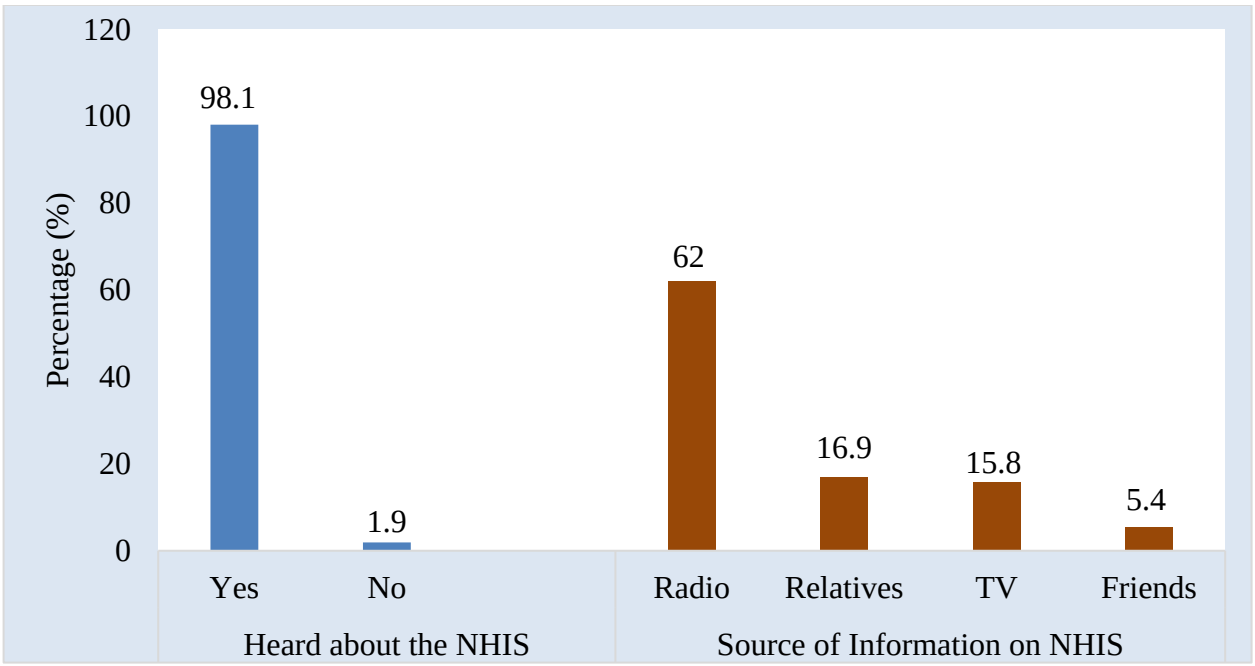



**Figure 4.1:** Awareness and source of information on NHIS

Almost all the respondents 355 (98.1%) admitted they had heard of the National Health Insurance Scheme. Among this subgroup, the main source of the information was from the radio (62%). Other reported sources of information included relatives, TV, and friends. These were less than 40% (Figure 4.1).

**Table 4.2:** Enrolment into the NHIS among the respondents

| Variables (N=362) | Categories | n (%) |
|---|---|---|
| **Enrollment in the NHIS** | Yes | 250 (69.1) |
| | No | 112 (30.9) |
| **Among the enrolled participants ( n=250)** | | |
| **Convienince using the card at the hospital** | Yes | 235 (94.0) |
| | No | 15 (6.0) |
| **Grading healthcare using NHIS card** | Very good | 107 (42.8) |
| | Good | 141 (56.4) |
| | Poor | 2 (0.8) |
| **Willingness to pay more to improve the quality of health service** | Yes | 225 (90.0) |
| | No | 25 (10.0) |

**Source:** *Field data*

Enrolment into the national health insurance scheme was found to be nearly 70% among the respondents. Among this number, 94% indicated that they found it easy using the card at the hospital. On their satisfaction with healthcare quality using the card, 43% and 56% felt that it was very good and good respectively. Less than 1% were of the view that it was poor.

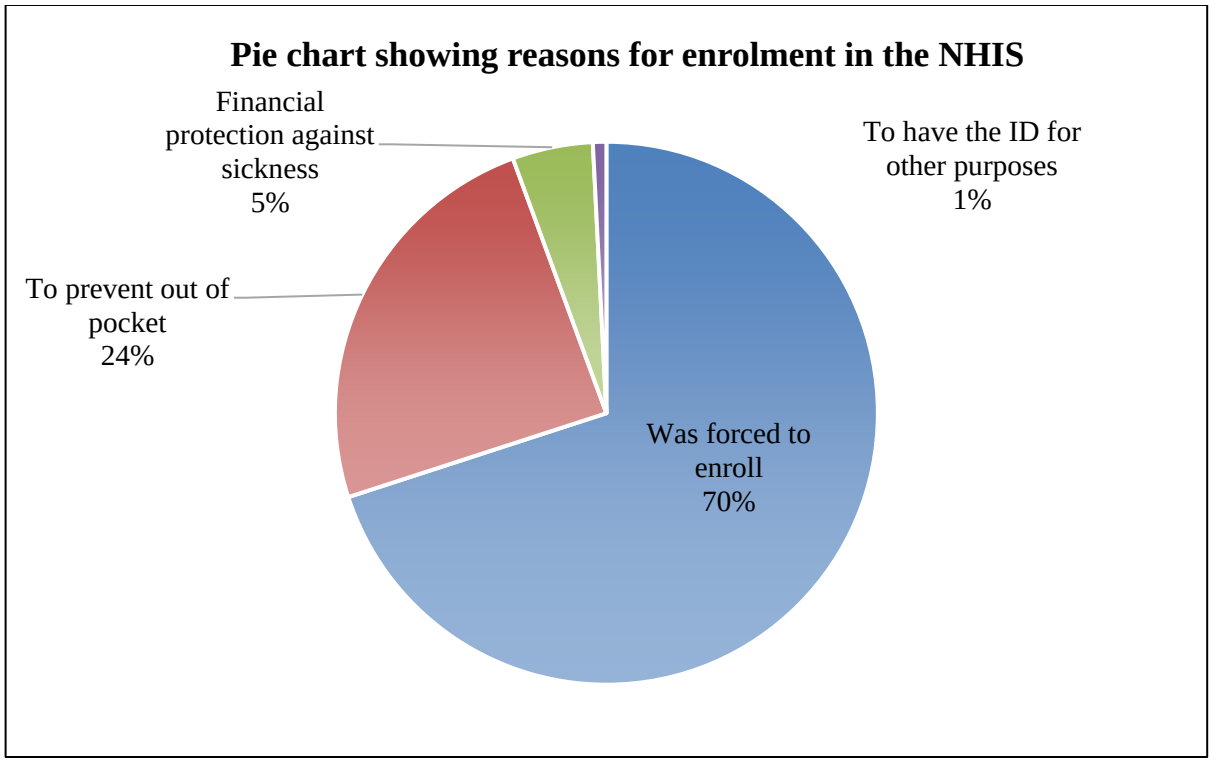



**Figure 4.2:** Reasons for enrolment into the NHIS

In Figure 4.2, respondents gave their reasons for enrolling into the national health insurance scheme. It was interesting to find that a higher proportion of respondents (70%) indicated that they were forced to enroll. This implies that enrolment was not by their own intentions but force or influence from others. The next major reason was to avoid or prevent out-of-pocket payment at the accredited health facility (24%). Other reasons included financial protection against sickness and the willingness to have the card for other purposes (5% and1% respectively).

### 4.4 Accessibility and utilization of NHIS accredited health services

Accessibility here, refers to the availability and the ease of use of NHIS accredited health facilities in the geographical areas of the respondents. Respondents were interviewed during

the study to find out how they are able to have acces to or use the health facility. Issues relating to distance, payment, facility type, among others were studied.

**Table 4.3: Respondents' perceived accessibility and utilization of NHIS accredited health services**

| Variables | Category | n (%) |
|---|---|---|
| How far is the NHIS accredited health facility from your home? | Very Far | 51 (14.1) |
| | Far | 189 (52.2) |
| | Not Far | 122 (33.7) |
| NHIS subscription motivates me to visit health facility (n=250) | Yes | 236 (94.4) |
| | No | 14 (5.6) |
| Payment for health care for those not enrolled (n=112) | Out of Pocket Payment | 88 (78.6) |
| | Family Support | 24 (21.4) |
| Health facilities visited when sick | Herbal clinic | 10 (2.8) |
| | Pharmacy | 81 (22.4) |
| | Private hospital | 46 (12.7) |
| | Public hospital | 225(62.2) |

**Source:** *Field data*

Enrolment into the NHIS was the main motivation for visiting the hospital for the majority of the respondents (94%) who had subscribed. Public hospital was the major place of visit among more than half of the respondents. Visiting private facilities and pharmacies were found among 35% of the respondents. Less than 5% consoled herbalists or traditionalist for care.

### 4.5 Challenges during NHIS registration and use of health facility with NHIS

Anecdoctal evidence from users of the NHIS were about the challenges that characterized the registration process and the use of the health insurance card at the facilities. As part of the objectives of this study, respondents were asked to recount the challenges they went

through with registration into the NHIS and the use of the card at the health facilities. Table 4.4 provides more details on the quantitative information.

Table 4.4: Perceived challenges encountered during NHIS registration and its use

| **Variables (N=250)** | **Category** | **n (%)** |
|---|---|---|
| Easy access to the NHIS office during registration | Yes | 234 (93.6) |
| | No | 16 (6.4) |
| Period of receiving card after registration | 0-3 months | 227 (90.8) |
| | 4-6 months | 21 (8.4) |
| | Above 6 months | 2 (0.8) |
| Temporal card was issued | Yes | 8 (3.2) |
| | No | 242 (96.8) |
| How is your experience in using the NHIS card in the health facility? | Very good | 106 (42.4) |
| | Good | 137 (54.8) |
| | Poor | 7 (2.80) |

**Source:** *Field data*

Almost all the respondents (94%) acknowledged easy access to the NHIS office or facility during registration. NHIS cards were issued within three months after registration for over 90% of the respondents. Less than 10% had their cards beyond three months after registering for it. On the question regarding the experiences for the use of the insurance cover in accredited health facilities, the data revealed 42% of the respondents admitted it was "*Very good*" with an insignificant proportion (3%) reporting it was "*Poor*". (Table 4.4).

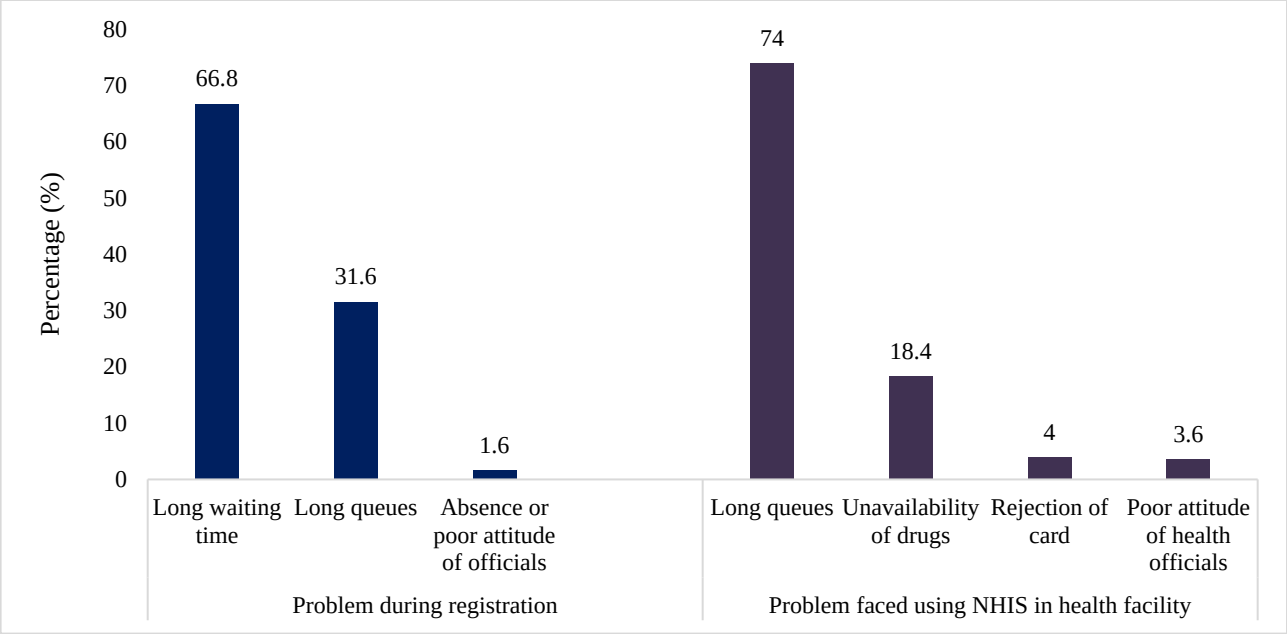



**Figure 4.3: Reported challenges during enrollment and use of health facility**

Long waiting time was cited as the major challenge during NHIS registration (67%) followed long queues (32%) and the absence of officials (2%). Also, some major challenges during use the card at the health facility included long queues (74%) and unavailability of drugs (18%).

### 4.6 Potential factors influencing the enrollment into the NHIS

The decision to enroll in the NHIS were affected by several factors. These factors included the demographic characteristics of the user, socio-economic status, perceived benefit of the scheme and perceived health risk. Under this section, a bivariate analysis was performed to determine factors associated with NHIS enrolment.

**Table 4.5: Bivariate analysis of potential demographic factors associated with NHIS enrollment**

| Variables (N=362) | Enrolled n=250(%) | Not Enrolled n=112(%) | P-Value |
|---|---|---|---|
| **Age –group (years)** | | | 0.033* |
| 18-30 | 130 (52.0) | 72 (64.3) | |
| 31-50 | 71 (28.4) | 28 (25.0) | |
| 51-69 | 40 (16.0) | 7 (6.25) | |
| 70+ | 9(3.60) | 5 (4.46) | |
| **Gender** | | | <0.001* |
| Female | 186 (74.4) | 50(44.6) | |
| Male | 64 (25.6) | 62(55.4) | |
| **Employment Status** | | | 0.001* |
| Self employed | 132 (52.8) | 46(41.1) | |
| Public | 21 (8.4) | 1(0.9) | |
| Private | 46 (18.4) | 28(25.0) | |
| Unemployed | 51 (20.4) | 37(33.0) | |
| **Educational level** | | | 0.001* |
| No education | 34 (13.6) | 22 (19.6) | |
| Primary/Middle/JHS | 108 (43.2) | 58 (51.8) | |
| S.H.S/Tech/Voc | 88 (35.2) | 32 (28.6) | |
| Tertiary | 20 (8.0) | 0 (0.0) | |
| **Marital Status** | | | 0.004* |
| Single | 54 (21.6) | 44(39.3) | |
| Married | 105 (42.0) | 31(27.7) | |
| Co-habiting | 77 (30.8) | 31(27.7) | |
| Divorced/Widowed | 14 (5.6) | 6(5.4) | |
| **Income status** | | | 0.006* |
| < GH¢100 | 27 (24.1) | 46 (18.4) | |
| GHC100-200 | 40 (35.7) | 114 (45.6) | |
| GHC200 and above | 8 (7.1) | 39 (15.6) | |
| No income | 37 (33.0) | 51 (20.4) | |

***Measured association is statistically significant at a chosen $\alpha$-level of 0.05. source:field data***

Table 4.5 contains the test of statistical association between respondents' demographic characteristics and enrolment into the NHIS using Fisher's Exact. Using a statistical significance test level ($\alpha = 0.05$), it was found that all the demographic variables under study were significantly associated with the enrolment of the respondents at the time of the study. For example, the age and gender of respondents had a p-value of 0.033 and <0.001 respectively and enrolment was higher among females (74%) than males (36%). Educational level and employment status were also respectively found to be statistically significant with a p-value less than 0.05.

Also, enrolment was higher among those who were married (42.0%) and co-habiting (31%) than those single (22%) or divorced (5.6) and this was also significantly associated with the enrollment status at the time of participation with a p-value of 0.004.

**Table 4.6: Bivariate analysis of awareness factors and association with NHIS enrollment**

| **Variables (N=362)** | **Enrolled n=250(%)** | **Not Enrolled n=112(%)** | **P-Value** |
|---|---|---|---|
| **Heard about the NHIS?** | | | |
| Yes | 249 (99.6) | 106(94.6) | 0.004* |
| No | 1(0.4) | 6(5.36) | |
| **Source of information about NHIS** | | | |
| Friends | 15 (6.0) | 4(3.8) | 0.567 |
| Relatives | 38 (15.3) | 22(20.8) | |
| Radio | 156 (62.7) | 64(60.4) | |
| TV | 40 (16.1) | 16(15.4) | |
| **Distance to NHIS accredited HF** | | | |
| Very far | 24 (9.6) | 27 (24.1) | 0.001* |
| Far | 133 (53.2) | 56 (50.0) | |
| Not Far | 93 (37.2) | 29 (25.9) | |

**Measured association is statistically significant at a chosen $\alpha$-level of 0.05. source: field data*

From Table 4.6, all the tested factors were found to be significantly associated at p-values <0.05 except for the reported sources of information on NHIS (p=0.567). Almost all those who had heard about NHIS had enrolled (99.6%) and this was significant at p=0.004. Also, the distance to the nearest health facility was also significant as only 9.6% of those who live very far from an accredited health facility were enrolled.

### 4.6.1 Multivariate analysis of significant factors associated with NHIS enrolment among the respondents

A logistic regression model was fitted to determine the strength of association between selected factors from the bivariate analyses performed.

**Table 4.7: Logistic Regression of potential factors influencing NHIS enrollment**

| Variables | P-value | COR (95%CI) | P-value | AOR (95%CI) |
|---|---|---|---|---|
| **Age –group (years)** | | | | |
| 18-30 | Ref | 1 | Ref | 1 |
| 31-50 | 0.204 | 1.40 (0.83-2.38) | 0.894 | 0.95 (0.43-2.10) |
| 51-69 | 0.006* | 3.16 (1.33-7.54) | 0.009* | 5.60 (1.52-20.53) |
| 70+ | 0.995 | 0.99 (0.32-3.10) | 0.497 | 1.69 (0.37-7.61) |
| **Gender** | | | | |
| Female | Ref | 1 | Ref | 1 |
| Male | <0.001* | 0.28 (0.17-0.45) | 0.001* | 0.14 (0.07-0.25) |
| **Employment Status** | | | | |
| Self employed | Ref | 1 | Ref | 1 |
| Public | 0.027* | 7.32 (0.93-57.69) | 0.384 | 2.72 (0.29-25.94) |
| Private | 0.057 | 0.57 (0.32- 1.03) | 0.285 | 0.68 (0.34-1.37) |
| Unemployed | 0.007* | 0.48 (0.28- 0.83) | 0.258 | empty |
| **Educational level** | | | | |
| No education | Ref | 1 | Ref’ | 1 |
| Primary/Middle/JHS | 0.559 | 1.20 (0.64-2.25) | 0.479 | 1.35 (0.59-3.06 |
| S.H.S/Tech/Voc | 0.092 | 1.78 (0.90-3.51) | 0.013* | 3.53 (1.30-9.57) |
| Tertiary | 0.001 | Empty | Empty | empty |
| **Marital Status** | | | | |
| Single | Ref | 1 | Ref | 1 |
| Married | 0.004 | 2.75 (1.54-4.93) | 0.649 | 1.25 (0.48-3.23) |
| Co-habiting | 0.016 | 2.02 (1.12-3.64) | 0.269 | 1.53 (0.72-3.28) |
| Divorced/widowed | 0.221 | 1.90 (0.67-5.42) | 1.675 | 1.39 (0.30-6.53) |
| **Income status** | | | | |
| < GH¢100 | Ref | 1 | Ref | 1 |
| GHC100-200 | 0.090 | 1.67 | 0.121 | 1.83 (0.85-3.93) |
| GHC200 and above | 0.019* | 2.86 | 0.229 | 2.07 (6.79) |
| No income | 0.515 | 0.80 | Omitted | 1 |
| **Heard about the NHIS?** | | | | |
| Yes | Ref | 1 | Ref | 1 |
| No | 0.0016 | 0.071 (0.01-0.62) | 0.012* | 0.05 (0.01-0.52) |

| | | | | |
|---|---|---|---|---|
| **Farness of NHIS accredited HF from your home.** | | | | |
| Very far | Ref | 1 | Ref | 1 |
| Far | 0.0019 | 2.67 (1.40-5.10) | 0.214 | 1.63 (0.75-3.52) |
| Not Far | 0.002 | 3.61 (1.75-7.43) | 0.045* | 2.40 (1.02-5.63) |

***(measured association is statistically significant); COR: crude odds ratio; AOR: Adjusted odds ratio; CI: Confidence interval; Ref: reference group**

The multivariate logistic regression results are provided in Table 4.7. Crude odds ratio and adjusted odds ratio are provided for comparison purposes. The odds ratio gives an indication of the strength of association between the independent variable and the dependent variable, therein referred to as NHIS enrolment. It was found that a significant association existed between sex or gender and NHIS enrolment. That is, compared to females, males were 86% less likely to enroll adjusting for other demographic variables (AOR:014; $p<0.001$; 95%CI:0.07-0.25).

Also, with reference to those who had no formal education, those who had secondary education had 3.5 times higher odds to enroll on NHIS and this was statistically significant at $p<0.05$ (AOR:3.53; 95%CI: 1.30-9.57). Other factors such as awareness of NHIS and distance to the nearest NHIS accredited facilities were also found to be significantly associated with the enrolment status. Compared to those who had heard about NHIS, those who had not showed lesser odds of 0.05 (95% less likely) of enrolment (AOR:0.05; 95%CI:0.01-0.52; $p=0.012$) after adjusting for other covariates in the model.

### 4.7 Renewal of NHIS membership after the expiration

Respondents were asked about their intentions of continuing their enrolment on the NHIS, whilst some expressed interest to renew their membership, others indicated that they will not

renew after expiration of their cards. This and other factors such as the reasons behind their decisions are contained in Table 4.8

**Table 4.8: Renewal of NHIS membership among respondents**

| Variables | Category | Frequency (%) |
|---|---|---|
| Renewal of membership | Yes | 225 (90.0) |
| | No | 25 (10.0) |
| Reasons for not willing to renew (n=25) | Unable to afford renewal payment | 11 (44.0) |
| | Not satisfied with the provider | 11 (44.0) |
| | Difficulty in accessing services | 3 (12.0) |
| Reasons for willing to renew Membership | To avoid cut-off from service | 3 (1.3) |
| | To access healthcare | 188 (83.7) |
| | It is better than out of pocket | 34 (15.1) |

The majority of the respondents expressed their willingness to renew their membership when the card expires, however, about 10% expressed their intentions not to renew their membership. The two main reasons cited for not renewing their card were service fee and dissatisfaction with services received.

**Table 4.9: Bivariate analysis of factors associated with willingness to renew membership**

| Variables (N=250) | Willing to renew n=225 (%) | Not willing to renew n=25 (%) | P-Value |
|---|---|---|---|
| **Age –group (years)** | | | |
| 18-30 | 112 (49.8) | 17 (68.0) | 0.220 |
| 31-50 | 65 (28.9) | 6 (24.0) | |
| 51-69 | 39 (17.3) | 1 (4.0) | |
| 70+ | 9 (4.0) | 1 (4.0) | |
| **Gender** | | | |
| Female | 170 (75.6) | 15 (60.0) | 0.98 |
| Male | 55 (24.4) | 10 (40.0) | |
| **Employment Status** | | | |
| Self employed | 123 (54.7) | 8 (32.0) | 0.065 |
| Public | 19 (8.4) | 2 (8.0) | |
| Private | 41 (18.2) | 5 (20.0) | |
| Unemployed | 42 (18.7) | 10 (40.0) | |
| **Educational level** | | | |
| No education | 35 (15.6) | 0 (0.0) | 0.014* |
| Primary/Middle | 100 (44.4) | 8 (32.0) | |
| S.H.S | 72 (32.0) | 15 (60.0) | |
| Tertiary | 18 (8.0) | 2 (8.0) | |
| **Marital Status** | | | |
| Single | 41 (18.2) | 12 (48.0) | 0.009* |
| Married | 100 (44.4) | 6 (24.0) | |
| Co-habiting | 70 (31.1) | 7 (28.0) | |
| Divorced/widowed | 14 (6.2) | 0 (0.0) | |
| **Income status** | | | |
| < GH¢100 | 45 (20.0) | 1 (4.0) | 0.044* |
| GHC100-200 | 102 (45.3) | 11 (44.0) | |
| GHC200 and above | 36 (16.0) | 3 (12.0) | |
| No income | 42 (18.7) | 10 (40.0) | |
| **Distance to the nearest accredited facility** | | | |
| Very far | 20 (20.8.9) | 4 (16.0) | 0.396 |

| | | | |
|---|---|---|---|
| Far | 122 (54.2) | 11 (44.0) | |
| Not far | 83 (36.9) | 10 (40.0) | |
| **Easy access to NHIS office** | | | |
| Yes | 209 (92.9) | 25 (100.0) | 0.381 |
| No | 16 (7.1) | 0 (0.0) | |

*(measured association is statistically significant); p<0.05; Test of association (Fisher's exact); percentage in columns

Table 4.9 shows the bivariate associations of factors influencing respondents' willingness to renew their membership when expiration is due. Most of the factors considered here did not show a statistical significance except for educational level, marital status, and income. However, the data revealed that the educational level of respondents was significant at p<0.05. Also, the reported marital status and income of the respondents at the time of the study showed a statistically significant association with the intent to renew coverage at the time of expiration with p-values of 0.009 and 0.044 respectively.

# CHAPTER FIVE

# 5.0 DISCUSSION

## 5.1 Introduction

This chapter provides discussions on the findings of the study. The discussions relate the findings of this study to other studies done on enrollment and renewal of the National Health Insurance Scheme.

This study was specifically undertaken to examine the factors influencing NHIS enrollment and renewal in the Lower Manya Krobo Municipality of the Eastern Region, Ghana.

## 5.2 Demographic characteristics of respondents

The average age among respondents in this current study was 33.8 years old with the majority of respondents falling within the age group of 18-30 years (55.8%). A similar mean age was reported by Ahmed (2015); Fenny, Kusi, Arhinful, and Asante, (2016) in their studies conducted in the Sekyere South District and five selected districts across three ecological zones (coastal, forest and savanna) of Ghana respectively.

It was also revealed from the gathered data that the majority of the respondents were married or cohabiting (67.4%). The higher proportion of married respondents may be partly due to the age group in which most of the respondents were found, that is, 18-50 years. Reports from Ghana Statistical Services, GSS (2011) show that most Ghanaians who were married were within such age group. It was also found in this study that most of the respondents were self-employed (49.2%). This finding confirms the occupational status of most people in Ghana as earlier surveys confirm that the majority of the active working force in Ghana are in the informal sector (GSS, 2011).

### 5.3 Health Insurance Enrolment and renewal among respondents

Health insurance is regarded as one of the effective methods of health financing compared to cash for treatment (Boateng & Awunyor-vitor, 2013) or what was previously termed in Ghana as 'cash and carry' (Ahmed, 2015). In Ghana, the National Health Insurance Scheme was introduced in the year 2003 to replace the 'cash and carry' system (Kotoh, Aryeetey, & Geest, 2018).

This study found a high level of NHIS enrollment among the respondents as the majority of them (69.1%) were enrolled in the scheme. This finding was encouraging because the proportion of enrollees found among this population was nearly 100% greater than the national average (36.8%). Contrary to this finding, the study conducted in 2015 among less privileged areas of the Greater Accra Region such as Agogbloshie found the percentage of enrollment to be lower than the national average of 24% at the time (Tawiah, 2015).

Furthermore, this current study observed that almost all those enroled into scheme expressed their interest in renewing their membership when the expiration date is due. Dissimilar to

reports by Atinga, Abiiro, and Kuganab-lem (2015), they observed that dropouts or non-renewal had increased from 6.5% in 2008 to 34.8% in 2012. They reported that people's interest to renew their memberships dropped every year.

The main reasons given by respondents for enrolling into the scheme were to enable them to access quality health care when they are ill and also to enable them reduce their health care expenditure. These reasons given by the respondents were exactly some of the purposes for instituting a health care insurance system. In a qualitative study on factors that influence enrolment and retention in Ghana's National Health Insurance Scheme, Kotoh *et al*., (2018) found similar motivation among the people which served as their main motives for enrolling. Other studies (Ahmed, 2015; Boateng & Awunyor-vitor, 2013; Saitoti, 2016), have reported similar motives for enrolling on NHIS. Meanwhile, in this current study, a higher proportion also was of the view that they were forced to enroll in the scheme.

This study found that those who were not willing to renewal membership on the scheme did so because they belived that they do not receive the quality of care they required from providers. They also complained that their inability to afford the renewal fees. These findings were no different from the general perception held among the people of Ghana about the NHIS. Kotoh *et al*. (2018), reported that most Ghanaians believe that having health insurance or going to the hospital with health insurance does not assure quality health care. They continued that most Ghanaians who have visited the hospital with health insurance complained about delay or difficulty in accessing service from health care providers (Ahmed, 2015).

### 5.4 Factors associated with National Health Insurance Scheme enrolment

The enrollment on NHIS can be influenced by so many factors which may determine whether a person will decide to sign on or not. This study as part of its objectives, examined socio-demographic factors, awareness factors that could be associated with NHIS enrollment among the people of the Lower Manya Krobo Municipality. A bivariate analysis showed a statistically significant association between enrollment status and age group, gender, employment status, educational level, marital status, and income level ($p<0.05$). This study also found a strong association between respondnets who have heard about NHIS, distance to NHIS accredited health facility and enrolment.

On the issue of gender factor, it was revealed from the study that males had 86% lesser odds of enrolling on the scheme compared to females. This finding corroborates findings of similar work done by Manortey *et al.* (2014) in selected rural communities in the Ashanti Region of Ghana which indicated that male household heads were less likely to enroll in the scheme.

Again, the odds of enrollment were 3.5 times higher among those with secondary education compared with those with no formal education (AOR:3.53; 95%CI: 1.30-9.57). Educational status was also found to be a positive predictor of NHIS among some households.

Among the factors found to be significant predictors of NIHS enrolment was the income status of the people. It was also found that participants with a monthly earning above GH¢ 200.00 were 2 times more likely to be enrolled in the scheme compared to those with monthly earning of below GHC 200.00, controlling for other covariates in the model. Income or wealth has been reported by several studies as one of the determinants of health insurance enrollment (Kotoh *et al*. 2018; Luhanga, 2015). A case study of Bugando Medical Center of Tanzania found more membership among household with middle or high-level

income than those who have low incomes (Luhanga, 2015). Also, in the Upper West Region of Ghana, Dixo (2014), found individual and household wealth were the primary determinants of enrolment. Manortey *et al., (*2014), also showed in their research finding, that residents in the classified Middle and High SES brackets had 1.47 and 1.66 times higher odds, respectively, of enrollment compared to their counterparts in the Low SES category. This confirms that peoples' income influence greatly their ability to be enrolled in a health insurance scheme (Asomani, 2014; Greef, Monareng, & Roos, 2016; Wal, Nsiah-Boateng, & Asante, 2018).

Additionally, awareness of the existence of NHIS and the distance to an NHIS accredited health facility were found to be some of the factors influencing enrollment (p-value=0.012and 0.045 respectively) in this study. Compared to those who had heard about NHIS, those who claimed they had not heard about NHIS were 95% less likely to enroll in the NHIS (AOR:0.05; 95%CI: 0.01-0.52).

### 5.5 Factors influencing the renewal of NHIS among respondents

The study also revealed that among those registered in the NHIS in the study area, 90% of them had intentions of renewing their membership when it expired. That is, they have no intention to drop out from the enrolement. Awudu, (2016) also found that out of the 380 respondents, 264 (69.5%) were active members of the scheme and were willing to stay active in the future.

A test of association performed by this study found that respondents' education level, marital status, and income status were associated with intentions to renew NHIS membership and were statistically significant. Aside these factors found by this current

study as influencing renewal intentions, other factors that have been reported by previous studies included staff attitude, benefit package and premium price as scheme factors as well as waiting time, provider staff attitude, drug availability and distance to facility (Atinga et al., 2015; Awudu, 2016; Boateng & Awunyor-vitor, 2013)

# CHAPTER 6

# CONCLUSION AND RECOMMENDATIONS

## 6.1 Conclusions

The study revealed high NHIS enrolment among the respondents which was almost 100% higher than the national average.

From the study and the subsequent analysis of the data, it was observed that the foremost reasons for enrolment in the NHIS were to serve as financial protection against sickness and also to prevent out of pocket payment for health care services. From the logistic regression analysis, it was noted that enrollment tends to increase as the ones' earnings increase and when one's residence was closer to an accredited NHIS facility. Other demographic factors such as sex, educational status, marital status and age group were also found to be associated with NHIS enrollment.

Almost all the respondents had intentions of renewing their membership when it expires. Those who had no such intention to renew their NHIS were of the view that they could not

afford the fee; there were also not satisfied with provider services and had difficulty to access services. The educational status, marital status, and income status were the factors found to be significantly associated with intentions to renew membership.

## 6.2 Recommendations

Based on the outcomes of this study, the following recommendations made to the appropriate authority for consideration.

- **To NHI Authority**
    1. The National Health Insurance Authority should put in place a policy to offer financial protection to the poor and vulnerable groups or those with lower income levels to enable them to enroll and renew their enrolment into the scheme.
    2. The National Health Insurance Authority should put in place an educational programme that will provide continuing education and awareness creation to help the citizenry understand the importance of enrolling into the scheme.
    3. The National Health Insurance Authority should fashion out effective monitoring and evaluation mechanisms needed to improve on the access, quality of healthcare and the operations of the NHIS in Ghana. A constant monitoring and evaluation activity must be conducted regularly in order to access the progress of the scheme.

- **Recommendation for further studies.**

    1. A qualitative study is recommended for future research work to get the in-depth views of rural and rural communities on the National Health Insurance Scheme.

### 6.3 Limitations of the study

The study looked at factors influencing enrolment in the NHIS of Ghana and did not cover other forms of health insurance such as the private commercial and private mutual health insurance schemes. Also, the nature of the study area and the time limitations of this study did not allow for proportionate sampling to ensure each cluster was adequately represented.

Moreover, as a cross-sectional study, it is unable to establish causality. Hence, it is unable to emphatically state that the factors identified in this study were the causes of enrolment or non-enrolment in the National Health Insurance Scheme among the people.

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# APPENDICES

## Appendix 1: Questionnaire

Factors Influencing Enrollment In National Health Insurance Scheme- A Case Study of Lower Manya Municipality

*This Questionnaire Is Developed To Ask For Your Opnions On The National Health Insurance Scheme (Nhis) Enrolment In Lower Manya Municipality In The Eastern Region. Any Information Given Will Be Kept In Strict Confidencial For Academic Purposes Only. Your Involvement Will Be Much Appreciated.*

**INSTRUCTION**
Please tick correctly where you have provided your answers.

Number…….. Date: ……/……/……..

Name of Community…….……..

**SECTION A: SOCIO DEMOGRAPHIC FEATURES**

1(a) Age ……..

2. Sex a) Female [ ] b) Male [ ]

3. Employment Status:
   a) Self-employed [ ] b) Public [ ] c) Private [ ] d) Unemployed [ ]

4. Level of Education
   a) No education [ ] b) Primary [ ] c ) S.H.S [ ] d) Tertiary [ ]

5. INCOME
   a) Less than GH¢50 – 100 [ ] b) GHC 100 - 200 [ ] c) GHC 200 and above [ ]

6. Marital Status
   a) Single [ ] b) Married [ ] c) Co-habiting [ ] d) Divorced/widowed [ ]

7. Religion
   a) Christian [ ] b) Muslim [ ] c) Tradition [ ] d) Other Specify:……

8. Ethnicity
   a. Krobo [ ] b) Ewe [ ] c) Akan [ ] d) Others specify:……

**SECTION A: AWARENESS ABOUT ENROLLMENT IN THE NHIS AMONG THE LOWER MANYA KROBO COMMUNITY.**

9. Have you heard about the NHIS?
   a) Yes [ ] b) No [ ]

10.How did you hear about NHIS?
   a) Through Friends [ ] b) Through Relatives [ ] c) Radio [ ] d)Television [ ]
   e)Newspapers [ ] f) Other Specify…….

11. Have you enrolled in NHIS?
   a) Yes [ ] b) No [ ] If **NO skip to ques. 14** If yes, **go to question 12**

12. What made you to enroll on the NHIS?
   a) To prevent out of pocket [ ] b) Forced to enroll [ ]
   b) Financial protection against sickness [ ] d) others ……

13. Do you find it easier to go to the hospital with the NHIS ID card?
   a) Yes [ ] b) No [ ]

14. Why have you not enrolled?
   a) I cannot afford premium [ ] b) always healthy [ ] c) Registration point is far [ ]

d) Other Specify [ ] ……

15. How will you grade health care using NHIS card?
a) Very good [ ] b) Good [ ] c) Poor [ ] d) Very Poor [ ]

16. Would you be willing to pay more to improve the quality of health service under the scheme?
a) Yes [ ] b) No [ ]

**SECTION B: ACCESSIBILITY AND UTILIZATION OF NHIS ACCREDITED HEALTH SERVICES. (For both enrolled and non – enrolled).**

17. How far is the NHIS accredited health facility from your home?
a) Very far [ ] b) Far [ ] c) Not far [ ]

18. Does the NHIS subscription motivate you to visit the facility when you are sick?

a) Yes [ ] b) No [ ] **If NO, skip to question 19**

19. how do you pay for health care when you are sick?
a) Out – of – Pocket Payment [ ] b) Family Support [ ]
c) Employment Insurance [ ] d) Others specify [ ]

20. Which of the health facilities do you go when you are sick?
a) Herbal clinic [ ] b) Maternity home [ ] c). Pharmacy shop [ ]
d) Private hospital [ ] e) Public hospital [ ]

**SECTION C: CHALLENGES DURING NHIS REGISTRATION. (For those enrolled)**

21. Did you have easy access to the NHIS office during enrolment period in your district?
a) Yes [ ] b) No [ ]

22 . How long did it take for you to receive your NHIS card after enrolment?
a) 0-3months [ ] b) 3-6months [ ] c) 6 months and above [ ]

23. Were you given a temporary card to use in place of the NHIS card?
a) Yes [ ] b) No [ ]

24. Which of these problems did you face in enrolling with the scheme?
a) Absence or poor attitude of officials [ ] b) Long queues [ ]
c) Long waiting time [ ] d) Other specify [ ]

**SECTION D: CHALLENGES DURING THE USE OF HEALTH FACILITY WITH NHIS**

25. How is your experience in using NHIS card in the health facility?
    a) Very good [ ] b) Good [ ] c) Poor [ ]

26. Which of these problems do you face in using your card in a health facility?
    a) Rejection of card [ ] b) Unavailability of drugs [ ] c) Poor attitude of health officials [ ]
    d) Long queues [ ] e) Other specify …….

27. Would you renew your membership when it expires?
    a) Yes [ ] b) No [ ] If no answer Q28 if yes answer Q29

28. why would you not renew membership?
    a) Unable to afford renewal payment [ ] b) Not satisfied with provider [ ]
    c) Difficulty in accessing services [ ] d) Other specify [ ]

29. why would you renew your membership?
    a) It will expired [ ] b) To access healthcare [ ] c) It is better than out of pocket

30. What would you suggest to people to enroll in the NHIS?
    a) It's available any time healthcare is needed [ ] b) Good health is assured [ ]
    c) No cash and Carry [ ] d) Other specify [ ]

**Appendix 2: Informed Consent**

Dear respondent;

My name is Susan Chobbah, a final year student of Ensign College of Public Health pursuing a program in **Masters in Public Health**. As part of my requirement to obtain my post graduate degree, I am required to undertake research work.

I am kindly requesting your sincere cooperation in answering these questions as part of my primary data for the study.

The objective of the study is to determine factors that influence the enrollment into NHIS Lower Manya Krobo municipality. You are kindly requested to respond freely to the questions to the best of your knowledge as it will bring vital achievement to the report. All information will strictly be confidential and be used for academic purpose only and not otherwise.

Thank you

Date……

Data collection Site……..