

UNIVERSITY OF CAPE COAST

HEALTH INSURANCE SUBSCRIPTION IN THE CAPE COAST METROPOLIS

HUBERT AMU

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BY

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THESIS SUBMITTED TO THE DEPARTMENT OF POPULATION AND HEALTH OF THE FACULTY OF SOCIAL SCIENCES, COLLEGE OF HUMANITIES AND LEGAL STUDIES, UNIVERSITY OF CAPE COAST IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR AWARD OF MASTER OF PHILOSOPHY DEGREE IN POPULATION AND HEALTH

DECEMBER, 2015

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that		
no part of it has been presented for another degree in this University or		
elsewhere.		
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Supervisors' Declaration		
We hereby declare that the preparation and presentation of the thesis were		
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ABSTRACT

The study examined subscription to the National Health Insurance Scheme (NHIS) in the Cape Coast Metropolis. Specifically, the study examined trends of subscription in the metropolis from 2005 to 2014, as well as barriers and motivation for subscription. The research adopted descriptive and explanatory study designs. Checklist and in-depth interview guides were used in collecting data from NHIS databases and 30 residents of the metropolis. Informed consent was sought from respondents before including them in the study. Analysis was done using SPSS and Excel.

The study found that NHIS subscription generally increased from 2005 to 2014. By 2014, the scheme had covered about 41 percent of the population of the Metropolis, and 38 percent of the Ghanaian population. It was also realised that the major motivational factors to health insurance subscription were; being able to access health care at a cheap cost as the health insurance premium is affordable, NHIS providing access to free drugs, serving as a safeguard against health challenges, financial protection against unforeseen health challenges and the scheme allowing people the ability to save extra money for other needs. Friends, family members and colleagues, were found to be major factors motivating subscription to the NHIS.

The study realised that major barriers to NHIS subscription were long queues and waiting time, perceived poor quality of drugs, corruption and negative attitude of services providers. Workshops should be organised by the National Health Insurance Authority and the Ghana Health Service, to entreat their workers, to exhibit positive attitudes towards clients in the exercise of their duties, so as to motivate more people to subscribe to the scheme.

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DEDICATION

To my family

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LIST OF ACRONYMS

AIDS Acquired Immune Deficiency Syndrome

CCMA Cape Coast Metropolitan Assembly

CSMBS Civil Servants Medical Benefit Scheme

GDHS Ghana Demographic and Health Survey

GSS Ghana Statistical Services

HCS Health Card Scheme

HIF Health Insurance Fund

HIV Human Immunodeficiency Virus

ILO International Labour Organization

IRDA Insurance Regulatory and Development Authority

MWS Medical Welfare Scheme

NHIA National Health Insurance Authority

NHIF National Hospital Insurance Fund

NHIS National Health Insurance Scheme

NSSSH National Social Security System for Health

PHPM Nola Pender's Health Promotion Model

SPSS Statistical Package for Social Sciences

SSNIT Social Security and National Insurance Trust

SSS Social Security Scheme

UAHCCC Universal Access to Health Care Campaign Coalition

UCC University of Cape Coast

UCS Universal Coverage Scheme

WHO World Health Organization

CHAPTER ONE

INTRODUCTION

Background to the Study

Health care financing has globally become a major issue of attention to governments and international organisations over the past five decades (Boakye-Frimpong, 2013). The world faces challenges in financing health care for its over 1.3 billion poor people. This is mainly due to the fact that many of its poor lack the required access to affordable and effective health care interventions (Lekashingo, 2012). Challenges in financing health care are also due to weaknesses in the delivery and financing of health care by most nations (Lekashingo, 2012). Strategies aimed at addressing issues related to international health policy have, therefore, consequently dominated debate and health research on the global front (Boakye-Frimpong, 2013) with governments instituting various interventions including health insurance policies to improve the health of their indigenes.

Developed countries such as Canada and Australia have been successful in adequately financing the health needs of their populace by combining both public and private insurance schemes (Dalinjong & Laar, 2013). The cost of financing health care in many developing countries has, however, remained a major social challenge in meeting the health needs of their populace (Carman & Eibner, 2014; Lagomarsino, Garabrant, Adyas, Muga & Otoo, 2012). This occurs as payment for health care out-of-pocket (the major source of health care financing) drains on patterns of spending in households (Kumi-Kyereme & Amo-Adjei, 2013). Several developing nations

(low and middle income countries) therefore, continuously explore varied avenues of funding their healthcare systems, as such systems, are largely under-funded.

User fees were implemented initially by some of these developing countries at points of healthcare delivery in order to generate enough revenue to run their various healthcare systems (Sarpong, Loag, Fobil, Meyer, Adu-Sarkodie & Schwarz, 2010). While user fees introduced in some of the countries resulted in improvements in the quality of healthcare delivery, the fees served as major barriers to full utilisation of health care services by the masses of the population and also prevented adherence to treatments that are long term, particularly among the poor (Sarpong et al., 2010). This therefore, makes health insurance an important choice of social health policy intervention for such countries (Kumi-Kyereme & Amo-Adjei, 2013).

Sarpong et al. (2010) noted that negative effects of user fees on utilisation of health care services have manifested in several countries and have contributed to inequity in access to healthcare with disadvantages particularly for the poor in developing countries. Out-of-pocket payments for healthcare at the point of service delivery have also been troubling for the economic disposition of the poor, therefore, causing serious challenges with regards to essential daily needs as their incomes are drained by healthcare spending (Leive & Xu, 2008). Health insurance schemes are therefore considered effective avenues of healthcare financing as they safeguard equity in access to healthcare for both the rich and the poor (Sarpong et al., 2010).

African countries have implemented various health policies in efforts to improve upon the health status of their indigenes, with some of the countries

including Tanzania, Rwanda, Nigeria and Kenya experimenting with health insurance schemes that combine both private and public financing arrangements (Mensah, 2011; Unumeri, 2009). In Tanzania for instance, Lekashingo (2012) noted that after the country's independence from the British in 1961, health services were mainly financed by the state through taxes. Health care services were then provided without any charges, for all citizens. In 1990, however, the Tanzanian government changed its policy for healthcare financing such that while the state continued to be the key financier of the health system, the citizens were also expected to contribute towards the delivery of healthcare services. To enhance contributions by the people, various mechanisms of financing were introduced. These included community health funds (CHF), user fees and health insurance. Lekashingo noted that Tanzania currently has a combination of mechanisms for financing healthcare which still includes health insurance.

In Kenya, the health system had consistently relied heavily on out-of-pocket payments charged in both private and public health care facilities since its independence from the British in December 1963, until the last five years (Republic of Kenya, 2011). Despite the fact that out-of-pocket payments accounted for 51.1 percent, 35.9 percent and 24.5 percent of the total health expenditure in 2001, 2005 and 2009 respectively (Republic of Kenya, 2011; Government of Kenya, 2009; Ministry of Health, Kenya, 2003), the national hospital insurance fund (NHIF), which is a mandatory health insurance fund covering both public and private formal sector workers and their dependents, is currently the main health insurer (Mulupi, Kirigia & Chuma, 2013).

Since the country's independence from British colonial rule in 1957, Ghana has adopted various health policy interventions that have primarily sought to attain quality health for persons resident in the country (Nketiah-Amponsah & Hiemenz, 2009). The purpose of these policies has been to improve efficiency, increase access and decrease inequalities in health (Boakye-Frimpong, 2013; World Health Organization [WHO], 2008).

Health care financing in Ghana started after independence with a taxfunded system called free health care, which provided healthcare services free of charge to Ghanaians and all other persons resident in Ghana. This policy progressively became unsustainable financially with the Ghanaian economic stagnating in the 1970s (Blanchet, Fink & Osei-Akoto, 2012). User fees were therefore introduced for hospital services to offset the financial burden of healthcare on the state, giving rise to cost sharing (Abubakari, 2012).

Introduction of user fees as part of cost sharing in public health facilities by the government exerted financial burden on the Ghanaian populace particularly, the poor in society (Abubakari, 2012). Progressive withdrawals in spending by government on health resulted in shortage of supplies and drugs and thereby deteriorated the quality of healthcare in the country. After adoption of structural adjustment reforms in 1983, the government raised and expanded user fees for public health care services in a system that became known as cash and carry (Abubakari, 2012).

The cash and carry system improved revenues for health facilities but was not properly regulated and implemented. The system, therefore, aggravated the plight of the poor with regards to healthcare accessibility, as it resulted in a general decline in utilisation of health care services in the country

(Blanchet et al., 2012). To ameliorate the adverse impacts of cash and carry especially on the poor, the National Health Insurance Scheme (NHIS) was introduced. Even though the scheme became operational in 2003 through the National Health Insurance Law (Act 650 of Parliament), mandatory health insurance had a legal framework in 2004 through the National Health Insurance Regulations (L.I. 1809) (Government of Ghana, 2004; 2003).

Financing of the NHIS, according to Universal Access to Health Care Campaign Coalition (2013), is done by a 2.5 percent insurance levy as Valued Added Tax (VAT) on goods and services, 2.5 percent deductions from pension contributions of workers in the formal sector with the Social Security and National Insurance Trust (SSNIT) and yearly premiums paid by adults (persons eighteen years of age and above). The scheme is also financed through monies allocated to the Health Insurance Fund (HIF) by the legislature in addition to grants, investments, donations, voluntary contributions and gifts (Boakye-Frimpong, 2013). SSNIT pensioners, persons who are seventy years and above, children under the age of eighteen years and pregnant women however, constitute exemptions on the NHIS from payment of yearly premium (Universal Access to Health Care Campaign Coalition, 2013).

The National Health Insurance Scheme covers about 95 percent of the disease burden of Ghana. These comprise services provided for out-patient clients such as diagnostic testing and operations including repair of hernia; most services for in-patient clients which include care by specialists, majority of surgeries and accommodation at the wards of health facilities; treatments for oral health; services related to maternal care including caesarean sections;

emergency care; and all drugs that are listed on the medicines list of the National Health Insurance Scheme (Blanchet et al., 2012).

Blanchet et al. (2012) however, noted that package of the scheme does not include some medical procedures that are very expensive. These include some surgeries, treatments for cancer (in exception of cervical and breast cancers), dialysis and transplant of organs. Others are surgeries not considered vital including cosmetic surgery, as well as some items that are of high profile to the Ghanaian health system, including anti-retroviral drugs for HIV-positive patients, as they are highly subsidised under the national AIDS control programme; a separate intervention meant to reduce the incidence and prevalence of HIV and AIDS in Ghana (Blanchet et al., 2012).

The institution mandated by law to manage the National Health Insurance Scheme is the National Health Insurance Authority (NHIA). The NHIA, in efforts to improve the scheme's performance in meeting the health needs of Ghanaians, has since its inception in 2003, taken a number of initiatives. These include the free maternal health care introduced in 2008, a health insurance claims processing centre established in 2010, introduction of clinical audit in 2010, creation of a consolidated premium account in 2011 and introduction of the national health insurance call centre in 2012. The Authority also introduced biometric identification cards in 2014 to improve client identification and efficient delivery of services.

A lot, however, still needs to be done for the scheme to fully realise its objective of providing universal access to healthcare for Ghanaians as majority of the poor in society are still being left behind (Kumi-Kyereme & Amo-Adjei, 2013). Reports on the health insurance have been provided by the NHIA from

2005 to 2012 which include the trends of insurance subscription in the country. These are presented in Table 1.

Table 1: NHIS Subscription in Ghana from 2005 to 2012

Year	Number of Active	Percentage of Ghana's
	Subscribers	Population insured
2005	1,348,160	6.31
2006	2,521,372	17.68
2007	6,643,371	36.56
2008	9,914,256	54.66
2009	10,638,119	61.96
2010	8,163,714	34
2011	8,227,823	33
2012	8,885,757	35

Source: National Health Insurance Authority (NHIA) (2012; 2011; 2010; 2009)

From Table 1, there were 1,348,160 subscribers to the NHIS in 2005, which increased to 2,521,372 in 2006. These figures represented 6.3 percent and 17.7 percent of the Ghanaian population respectively. In 2007, there were 6,643,371 subscribers to the scheme, but increased to 9,914,256 in 2008. The year 2009 recorded 10,638,119 subscribers to the National Health Insurance Scheme. This figure, however, decreased to 8,163,714 in 2010 representing 34 percent of the total population of the country (24,658,823) in that year. The total number of subscribers to the NHIS however increased from 8,227,823 in

2011 to 8,885,757 in 2012 (Ghana Statistical Service [GSS], 2013; NHIA, 2012; 2010; 2009).

Prior to 2010, an old methodology was used to calculate active subscribers to the scheme. This was done by subtracting the number of all expired identification cards since the implementation of the NHIS from the sum of all cards issued and those renewed (NHIA, 2010). A major challenge with this method was that the cumulative number of cards issued included members who had done multiple registrations and thus over-estimated the number of card holders (NHIA, 2010). It also included subscribers who were deceased. As a result of these and other challenges, a new methodology was introduced in 2010 (NHIA, 2010). Active membership of the NHIS then started being calculated based on the total of the number of new subscribers registered in a particular year and the total number of renewals recorded in the same year. This explains why the number of active subscribers to the scheme dropped from 10,638,119 in 2009 to 8,163,714 in 2010; a -23 percent change over the 2009 figure (NHIA, 2010; 2009).

In September 2010, the NHIA conducted a special registration exercise with the aim of increasing the NHIS subscriber base. This initiative targeted mainly the vulnerable and poor in all communities and at large congregation centres including markets, mosques and churches. The special registration exercise was carried out all over the country, enabling people who were already subscribed to the NHIS to renew their subscription and new members to register. This could, therefore, have accounted for the percent increase in subscription over the 2010 figure (Table 1).

Subscription to health insurance related services is largely determined by motivational factors and barriers (Dixon, Tenkorang & Luginaah, 2013). Subscribers who are provided with poor services tend to be dissatisfied as they spend longer hours before they are attended to, compared with clients who access healthcare through payments out-of-pocket (Jehu-Appiah, Aryeetey, Agyepong, Spaan & Baltussen, 2012). An understanding of the motivational factors and barriers of both subscribers and non-subscribers to the National Health Insurance Scheme is therefore pertinent.

Problem Statement

A major policy objective of the National Health Insurance Scheme when it was initiated in 2003, was to ensure that after five years of its implementation, all persons resident in Ghana would subscribe to the scheme. The scheme is thus meant to safeguard equity in healthcare accessibility, to adequately protect persons resident in the country, from devastating costs of healthcare (Agyepong & Adjei, 2008). The NHIS has since made progress over the last eleven years of its existence as a health care policy in the country. This progress has included the introduction of free maternal health care as part of the scheme. It also involves the scheme's package, which has included both in-patient and out-patient care. Moreover, an important progress made by the scheme, is the fact that it covers ninety-five percent of the disease burden of Ghana.

The NHIS has since its implementation in 2003, cumulatively recorded twenty-two million subscribers, out of which nine million have remained active subscribers (Dapatem, 2013; Mahama, 2013). The implication is that

thirty-five percent (35%) of the country's over 25 million population is subscribed to the scheme. This is corroborated by the Universal Access to Health Care Campaign Coalition [UAHCCC] (2013) which argued that the NHIS is far from realising universal access to health care for Ghanaians and all other persons resident in Ghana, as fifteen million people, constituting sixty-five percent of the country's population, still pay out-of-pocket for accessing healthcare. The National Health Insurance Scheme was designed to be propoor (UAHCCC, 2013). In practice, however, most subscribers to the scheme are people in the upper wealth quintile, as the poor in society are rather less likely to subscribe to the scheme. This is consistent with Kumi-kyereme and Amo-Adjei's (2013) assertion that the major rationale of achieving equity in access to healthcare with the NHIS is failing.

Literature search conducted on the NHIS revealed that over sixty studies have been carried out on the scheme since its inception in 2003. These studies cover various aspects of the scheme including impacts/effects of the NHIS (Dapatem, 2013; Adjei, 2012; Blanchet et al., 2012; Boni, 2011; Mensah, 2011; Abugri, 2010; Ghana Health Service, 2009; Aikins & Okan, 2005; Osei-Akoto, 2004), health insurance equity (Boakye-Frimpong, 2013; Jehu-Appiah, Aryeetey, Spaan, Agyepong & Baltussen, 2011; Kuffour, 2011; Akazili, 2010; Garshong, 2010; Jehu-Appiah, Aryeetey, Spaan, De-Hoop, Agyepong & Baltussen, 2010; Gyapong, Gharshong, Akazili, Aikins, Agyepong & Nyonator, 2007), health care financing with NHIS (Akazili, Garshong, Aikins, Gyapong & McIntyre, 2012; Schieber, Cashin, Saleh & Lavado, 2012; Nguyen, Rajkotia & Wang, 2011), and perceptions of the NHIS

(Boateng & Awunyor-Vitor, 2013; Dalinjong & Laar, 2013; Jehu-Appiah et al., 2012).

Other researched areas of the NHIS are the historical and political overview of the NHIS (Rajkotia, 2009; Witter & Garshong, 2009; Assensoh & Wahab, 2008; Singleton, 2006; Sabi, 2005), feasibility of NHIS (Arhinful, 2003), supporting the NHIS policy and programme development (as a public policy) (Agyepong & Adjei, 2008; Arhin, 2013; Agyepong, Arhinful, Oppong-Peprah, Attuah & Baltussen, 2007), household decisions regarding the NHIS (Koch & Alaba, 2010), evaluation of the NHIS (Mensah, Oppong & Schmidt, 2010; Mensah, Oppong, Bobi-Barimah, Frempong & Sabi, 2010; Chankova, Atim & Hatt, 2009; National Development Planning Commission [NDPD], 2009; Sulzbach, 2008; Sulzbach, Garshong & Owusu-Banahene, 2005; USAID, 2005), demand for health insurance (Nketiah-Amponsah, 2009) and sustainability of the NHIS (Nuhu, 2012; Witter & Garshong, 2009; Yankah, 2009).

Subscription to the NHIS has also been studied by a number of researchers (Asuming, 2013; Gajate-Garrido & Ahiadeke, 2013; Gajate-Garrido & Owusua, 2013; Mahama, 2013; Kumi-Kyereme & Amo-Adjei, 2013; Universal Access to Health Care Campaign Coalition, 2013; Abubakari, 2012; Mensah, 2012; Goudge, Akazili, Ataguba, Kuwawenaruwa, Borghi, Harris & Mills, 2012; Mills, Ally, Goudge, Gyapong & Mtei, 2012; Saleh, 2012; Gobah & Zhang, 2011; Seddoh, Adjei & Nazzar, 2011; Sarpong et al., 2010; Asante & Aikins, 2008; ILO, 2005; Speck, Payroll & Hsaw, 2003). Most of these studies have however been conducted from the perspective of scheme managers and service providers with little attention on subscribers.

Attention has also not been paid to non-subscribers in order to access factors influencing their non-subscription to the scheme.

Experiences of subscribers and non-subscribers for instance, have not been ascertained simultaneously to examine and understand the factors which either serve as barriers or motivate them to subscribe to the NHIS. Such an understanding is however, vital for the creation of policy options. It is also useful for guiding implementation not only in Ghana, but also for similar schemes in low and middle-income countries. Attention has also not been paid to the trends of NHIS subscription since the scheme was introduced in 2003, both at a national level and in the Cape Coast Metropolis. This study therefore addresses the gaps in the literature.

Objectives of the Study

The study generally sought to examine health insurance subscription in the Cape Coast Metropolis. Specifically, the study sought to;

- Examine trends of health insurance subscription in the Cape Coast Metropolis from 2005 to 2014;
- 2. Explore factors motivating subscription to health insurance among residents of Cape Coast Metropolis; and
- Explore barriers to health insurance subscription among residents of the Cape Coast Metropolis.

Research Questions

The following research questions were posed:

- 1. What are the trends of health insurance subscription in the Cape Coast Metropolis from 2005 to 2014?
- 2. What factors motivate subscription to health insurance among residents of Cape Coast Metropolis?
- 3. What factors serve as barriers to health insurance subscription among residents of Cape Coast Metropolis?

Rationale of the Study

Motivational factors and barriers influence subscription to the NHIS (Boateng & Awunyor-Vitor, 2013; Dalinjong & Laar, 2013). Thus, the likelihood of people subscribing to the scheme may be influenced to a large extent, by the motivating factors and barriers to the scheme. If the motivational factors outweigh the barriers confronting subscription to the scheme, individuals may decide to subscribe to the NHIS and vice versa.

For individuals who have already subscribed to the scheme, they may decide to either renew their membership of the scheme or not, depending on their evaluation of the barriers and benefits derived from the scheme. Since motivational factors and barriers play important roles in subscription to the NHIS, the study examined the trends of subscription to the scheme from 2005 to 2014 in the metropolis to ascertain if there have been increases or decreases in subscription to the scheme over the nine-year period of NHIS existence in the Cape Coast Metropolis.

The study therefore adds to existing knowledge on the NHIS in Ghana and also bridges the gap in the literature on health insurance subscription in the Cape Coast Metropolis. The study also serves as a reference material for future research on the National Health Insurance Scheme. Thus, future studies particularly into the trends of NHIS subscription, motivating factors and barriers of the scheme may refer to this study.

Organization of the Study

The study is organized into five chapters. Chapter One entails introduction to the study and includes background to the study, rationale, objectives and research questions. Chapter Two reviews literature relevant to the study. The literature review is based on empirical studies conducted by other researchers that are related to the objectives of this study, in addition to the study's theoretical and conceptual frameworks. Chapter Three focuses on the research methodology. This includes the study design, setting, instruments for data collection and sampling, ethical considerations and data analysis. Chapter Four deals with the presentation of data and discussions based on the findings of the study. The final chapter (Chapter Five) deals with conclusions based on the research process, summary of the major findings of the study in addition to recommendations for policy and practice as well as further research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter reviews literature relevant to the study. Concepts related to this study are discussed in this chapter. These concepts comprise health care financing and health insurance. Also, empirical and theoretical literature are reviewed for this study. The empirical literature covers trends of health insurance subscription as well as factors motivating and barriers to health insurance subscription. The theories reviewed include theory of reasoned action, theory of planned behaviour, healthcare utilisation model, social cognitive theory, Nola Pender's health promotion model, the health belief model and the diffusion of innovation theory. The diffusion of innovation theory is adopted as the conceptual framework.

Health Care Financing

Hsaio and Liu (2001) define health care financing as "the mobilisation of funds for healthcare" (p. 261). This definition focuses only on allocation of funds to population groups and regions and for specific types of health mechanisms for paying for health care. It does not pay attention to individual needs but focuses only on groups. A broader and widely accepted definition for health care financing was, however, given by the World Health Organization (WHO) which was adopted for this study. WHO (2000) defined health care financing as the "function of a health system concerned with the mobilisation, accumulation and allocation of money to cover the health needs

of the people, individually and collectively, in the health system." (p. 1). WHO (2000) states that the "purpose of health financing is to make funding available, as well as to set the right financial incentives to providers, to ensure that all individuals have access to effective public health and personal health care" (WHO 2000, p. 2).

Health care financing has three main functions (WHO, 2000). These are the pooling of resources, collection of revenue and purchasing of services. Collection of revenue deals with the sources of revenue for health care, the type of payment (or contribution mechanism), and the agents that collect these revenues. All funds for health care, excluding donor contributions, are collected in one way or another from the general population or certain subgroups (Gottrett & Schieber, 2006; WHO, 2000). Collection mechanisms include taxation, social insurance contributions, private insurance premiums, and out-of-pocket payments. Collection agents (which in most cases also pool resources and purchase health care services from providers) could be government or independent public agencies (such as a social security agency), private insurance funds, or health care providers (Gottrett & Schieber, 2006; WHO, 2000).

Health Insurance

Caxton (2014) defines health insurance as an "indemnity opposed to the hazard of experiencing health charges amid single human beings" (p. 1). Caxton argues that "an insurer may create an average funding construction, such as a once-a-month surcharge either paysheet duty, to establish that cash is accessible to reward for the fitness heed advantages defined within the

indemnity accord". Mediclaim (2014) shares the same definition with Caxton but adds that the cost of health insurance premiums is deductible to the payer, and benefits received are tax-free (Mediclaim, 2014).

The Insurance Regulatory and Development Authority (IRDA) (2014) however, defines health insurance as "a type of insurance that essentially covers your medical expenses. A health insurance like other policies is a contract between an insurer and an individual/group in which the insurer agrees to provide specified health insurance cover at a particular premium, subject to terms and conditions specified in the agreement" (p. 2). Investopedia (2014) also define health insurance as "a type of insurance coverage that pays for medical and surgical expenses that are incurred by the insured" (p. 1). Health insurance can either reimburse the insured for expenses incurred from illness or injury or pay the care provider directly (Investopedia, 2014, p. 1).

Investopedia (2014) and IRDA's (2014) definitions of health insurance were adopted for this study. This is because, Investopedia's definition first of all, clearly states the fact that health insurance covers both medical and surgical expenses. Even though Ghana's National Health Insurance Scheme does not cover all medical and surgical expenses of the insured, the fact that the definition mentions these elements makes it suitable enough to be adopted for this study. Caxton's (2014) definition was, however, silent on this important element of Ghana's health insurance. Investopedia further indicated that health insurance either pays back the insured person for medical and surgical expenses incurred from illness or injury or pays the care provider directly. In Ghana's case, health care providers are paid directly by the NHIA for services provided to NHIS clients. This therefore makes the definition

applicable to the present study. Caxton's definition is however silent on this important element of the Ghanaian NHIS as well.

The IRDA definition will also be adopted because, the definition clearly indicates that health insurance covers the medical expenses of the insured. It further states that an individual pays a premium for which the insurance is provided, a characteristic which is similar to the health insurance scheme which this research seeks to study (Ghana's NHIS).

Trends of Health Insurance Subscription

While health insurance schemes have seen improvements in subscriber base, years and decades after introduction of such schemes in some countries, the health insurance schemes of other countries either made no improvements or experienced retrogression in number of subscribers (Blanchet et al., 2012; Levy & Ellis, 2006; Boote & Beile, 2005). Colombia, for instance, approved its universal health insurance scheme (Law 100) in 1993 (Escobar, 2005). This created the National Social Security System for Health (NSSSH), which currently covers more than 95 percent of the Colombian population. The approved healthcare policy was a universal health insurance scheme that entitled all citizens of the country, irrespective of their ability to pay, to a comprehensive healthcare benefits package.

Prior to 1993, the spread of health insurance was relatively limited in Colombia with only 24 percent of the population covered; a quarter to a third of the country's population (Escobar, Giedion, Giuffrida & Glassman, 2010; Escobar, 2005). When the universal health insurance scheme was introduced in 1993, however, a 49 percent subscription rate was recorded in that same

year. By 2007, 70 percent of Colombia's population had subscribed to health insurance and by 2011, more than 95 percent of the Colombian population were covered under the SGSSS (Sistema General de Seguridad Social en Salid). Colombia is reported to have reached universal health care coverage under health insurance by the year 2012 (Vargas-Zea, Castro, Rodríguez-Páez, Téllez & Salazar-Arias, 2012).

The Universal Coverage Scheme (UCS), which is Thailand's version of the health insurance, was implemented in 2001 (Arin & Hongoro, 2013). This according to Sakunphanit and Suwanrada (2010), consolidated earlier health insurance schemes which were targeted at improving access to health care among the poor in the country. These other insurance schemes were Civil Servants Medical Benefit Scheme (CSMBS), Social Security Scheme (SSS), Medical Welfare Scheme (MWS) and Health Card Scheme (HCS) (Arin & Hongoro, 2013). By 2011, the universal coverage scheme of Thailand covered 50 million people, which represented 75 percent of the total population of the country. Like Colombia, Thailand met its full implementation target of covering over 95 percent of its total population by 2012 (Arin & Hongoro, 2013; Health Insurance System Research Office, [HISRO], Thailand 2012; Sakunphanit, 2012).

Taiwan implemented its national health insurance in 1995 (Hsiao & Cheng, 2013). The scheme was introduced as a universal health insurance programme, which was meant to cover comprehensive health care services for all residents. Prior to implementation of the National Health Insurance (NHI), Taiwan's healthcare providers were paid by clients out-of-pocket. Also, before the national health insurance was introduced in 1995, about 57 percent of

Taiwan's population were insured through three separate social health insurance schemes. These were, government employee insurance, labour insurance and farmers insurance (Jui-Fen & Hsiao, 2003).

Implementation of the national health insurance however astoundingly saw 96 percent of the population subscribing to the health insurance by the end of 1995. This figure increased to 96 percent the following year (1996). By the end of the year 2001, 97 percent of the total eligible population of Taiwan had subscribed to the national health insurance (Chiao, Ksobiech & Wei, 2013). This trend has remained as such, till now. The implication is that like Thailand and Colombia, Taiwan has been successful in implementation of health insurance and as such reaching universal coverage of its inhabitants (Chiao et al., 2013; Hsiao & Cheng, 2013; Jui-Fen & Hsiao, 2003).

Unlike Thailand, Taiwan and Colombia, Nigeria's National Health Insurance Scheme has not been a success story. In efforts to ensure that every Nigerian has access to good health care services, the National Health Insurance Scheme (NHIS) of the country introduced various programmes to cover different segments of the Nigerian society (Arin & Hongoro, 2013). These are, formal sector social health insurance programme, urban self-employed social health insurance programme, rural community social health insurance programme, children under-five social health insurance programme, permanently disabled persons social health insurance programme, prison inmates social health insurance programme, tertiary institutions and voluntary participants social health insurance programme, and the armed forces, police and other uniformed services health insurance programme (National Health Insurance Scheme, Nigeria, 2014). However, since its launch in 1999, the

National Health Insurance Scheme, which has been the major initiative to expand health insurance in Nigeria, covers only about three percent (5 million subscribers) of the country's total population (Arin & Hongoro, 2013).

In the United States of America (USA), the federal government implemented the Medicare and Medicaid health insurance programmes in 1965 at a time when private insurance still paid about 75 percent of all health care costs in that country. Aside the state-run health insurance programmes (Medicare and Medicaid), there are several private health insurance schemes in the US. According to DeNavas, Proctor and Smith (2011), the trends of health insurance subscription in the US have not seen steady increases since 2000. In 2000, 10.5 percent of the public was covered by Medicaid, while 13.5 percent had Medicare. By 2010, these figures rose to only 14.5 percent and 15.9 percent respectively (DeNavas-Walt et al., 2012). As of 2010, about 84 percent of the American population were subscribed to any form of health insurance. This implies that more than 49 million people were without health insurance in that year (DeNavas et al., 2011).

Using data from the Commonwealth Fund Biennial Health Insurance Survey of 2012, Collins, Robertson, Garber and Doty (2013) noted that the percentage of young adults, aged 19 to 25, who were subscribed to health insurance in the US increased from 52 percent in 2010 to 59 percent in 2012. In 2010, 16 million adults aged 19 to 64 representing 16 percent, were subscribed to health insurance. This figure, however, increased to 29 million in 2012 but maintained the same percentage 16 percent with a total subscriber base of 30 million. Thus, in 2012, about 84 percent of U.S. adults aged 19 to 64, did not have any form of health insurance. The stagnation of the

percentage of people aged 19 to 64 at 16 percent from 2010 to 2012 implies that no improvements were recorded in the trends over the two-year period (Collins, et al., 2013; Centre for Disease Control and Prevention, 2012; DeNavas-Walt et al., 2012).

Factors Motivating Subscription to Health Insurance

Subscription to and renewal of health insurance membership are significantly influenced by motivating factors (Boateng & Awunyor-Vitor, 2013; Jütting, 2003). Boateng and Awunyor-Vitor (2013), for instance, indicated that while majority of people are of the conviction that joining a health insurance scheme will be of much benefit to them, only a few people do not hold this assumption, as some people are even unsure of whether they will benefit from subscribing to health insurance or not. The level of motivation an individual has regarding health insurance according to Boateng and Awunya-Vitor, however depends on the insured status of the individual. Thus, individuals subscribed (insured) to health insurance are more likely than unsubscribers (uninsured), to have been motivated to do so.

The implication, therefore, is that people make decisions on joining and renewing their subscription to the NHIS based on the level of motivation they have regarding the scheme (Boateng & Awunya-Vitor, 2013). Health insurance subscribers who are not motivated by the fact that joining health insurance is beneficial them, according to Jütting (2003) are less likely to renew their subscription than those who are motivated by the benefits derived from subscribing to the scheme.

With regards to specific motivational factors influencing subscription to health insurance, Arin and Hongoro (2013) argued that people are generally of the belief that subscribing to a health insurance scheme means they will not need to borrow money from friends and family to pay for hospital treatment when they and/or their family members fall sick. Notwithstanding this, some persons are usually unsure of deriving the benefit of not having to borrow money to pay for healthcare when they actually subscribe to a health insurance (Arin & Hongoro, 2013). Another important motivation for people in subscribing to health insurance is that it helps them to save money from paying exorbitant hospital bills when they or their family members fall ill. With this, persons who are subscribed to health insurance are more likely than those not subscribed to health insurance, to see it as a major motivational factor in subscribing to health insurance (Arin & Hongoro, 2013).

The implication, therefore, is that those subscribed to health insurance, see their subscription as a form of financial protection against unforeseen health challenges/problems (Mulupi et al., 2013). This motivational factor in subscription to health insurance as noted by Mulupi et al. (3013), is common to both subscribers and non-subscribers, as opposed to Arin and Hongoro's (2013) postulations. The issue of financial protection as a motivating factor in health insurance subscription according to Boateng and Awunya-Vitor, and Mulupi et al. is consistent with arguments made by Chneider and Diop (2001) in a study conducted in Rwanda which observed that subscription to health insurance significantly reduces out-of-pocket spending for a full episode of illness for sick subscribers. Chneider and Diop (2001) also argued that an important motivation for subscribing to health insurance is the fact that it

improves substantially, the subscriber's access to health care when the individual falls ill.

The decision to register or renew subscription to health insurance is significantly influenced by the level of convenience that the subscriber sees the scheme to offer him or her (Jütting, 2003). Thus, an individual who is motivated by the fact that health insurance benefits him or her regarding the level of convenience provided, is more likely to renew his or her subscription compared with an individual who is not motivated by the level of convenience offered by the scheme. Convenience, according to Boateng and Awunyor-Vitor (2013) is, however, influenced by the ease with which subscribers are able to collect their insurance cards.

Health insurance is seen by its subscribers as beneficial because it makes them feel at ease when their family members or relatives are hospitalised and builds on solidarity of communities to help other members of the community with different but not health problems (Mulupi et al., 2013). In a study conducted in Kenya, Mulupi et al. suggested that in the future, community members are much likely to be reluctant in contributing to help clear hospital bills of families because of harsh economic conditions. When this happens however, health insurance will serve as the only way of ensuring that such families are able to pay for health care (Mulupi et al., 2013).

According to Schultz, Metcalfe and Gray (2013), an important motivation for subscribing to health insurance is the affordability of the scheme. Schultz et al. (2013) stated that people join or renew their subscription to health insurance because of the affordable nature of the scheme in terms of the premium they have to pay in order to enjoy healthcare. People, especially

those above age sixty-nine also subscribe to health insurance because of the fact that they get to enjoy access to health care free of any charges (Basaza, Criel & Stuyft, 2008). In the case of Ghana's health insurance, subscription is free for persons below eighteen years and those sixty-five years and above. Thus, a motivation for subscribing to health insurance, to many people, is the fact that the cost (yearly premium) of joining the insurance is either low of free.

According to Schultz et al. (2013), the low cost/premium of health insurance is the number one factor which motivates subscription to health insurance. The low cost of health insurance as noted by Basaza et al. (2008) increases satisfaction with services provided. This is because, subscribers see the health services they enjoy as more expensive than the premium they pay for enjoying such services. Even people who have never been subscribed to health insurance see the low cost/premium of insurance as a major motivational factor associated with subscription to the scheme (Basaza et al., 2008).

A major motivating factor in subscribing to health insurance also has to do with the provision of prompt care to subscribers (Mladovsky & Mossialos, 2008). When there are emergencies for instance, health insurance subscribers are able to access treatment and care promptly without the need to worry about where they will get the needed funds for payment if health care were based on out-of-pocket payments (Mladovsky & Mossialos, 2008). Schultz et al. (2013) noted that though rare but interesting, a motivation for people subscribing to health insurance is for them to use the health insurance card as a form of identification.

According to Mladovsky and Mossialos (2008), the motivation for subscribing to health insurance is influenced greatly by the technical processes of the health insurance. When the processes involved in becoming a subscriber and accessing health care with health insurance are viewed positively, they increase the likelihood of enrolling onto the insurance scheme, as this is seen as a major motivation (Mladovsky & Mossialos, 2008).

An important measure of the level of motivation in subscribing to health insurance is the willingness of the health insurance subscriber to recommend the insurance to others, particularly friends and family members (Schultz et al., 2013). In a study conducted in Kenya, Schultz et al. argued that health insurance subscribers are mostly likely to recommend health insurance to their friends and relatives. For reasons not investigated by the researchers, Schultz et al. noted that persons not subscribed to health insurance are however very much not likely to recommend health insurance to their friends and family members.

Barriers to Health Insurance Subscription

A major barrier to health insurance subscription has to do with location. Boateng and Awunyor-Vitor (2013) for instance noted that people who are either subscribed or not subscribed to health insurance, see the location (office) of the scheme as inconvenient to them. According to Boateng and Awunyor-Vitor, the location of health insurance offices discourages people from registering or renewing their subscription to the scheme. Thus, the higher the inconvenience associated with location of insurance offices, the

higher it serves as a potential disincentive for subscription or renewal of membership (Boateng & Awunyor-Vitor, 2013).

Opening hours of health insurance offices also serve as a major barrier for people in either subscribing to health insurance or renewing their membership (Bruce, Narh-Bana & Agyepong, 2008). Thus, many people see the hours within which the offices of health insurance schemes open as a major disincentive for them in either trying to subscribe to the insurance as new members or to renew their subscription as existing subscribers (Bruce et al., 2008; Schneider, 2004).

Not only do people see the opening hours and location of health insurance offices as major barriers, they also see the period for collection of health insurance cards to be laborious and thereby serving as a major barrier to them in being subscribers to the scheme (Asante & Aikins, 2008; Schneider, 2004). Inconvenience associated with collection of health insurance cards however has a strong relationship with the insured status of individuals. Thus, people who are already subscribed to the health insurance but are seeking to renew their membership are more likely than those subscribing to the scheme for the first time, to go for their cards. In other words, new subscribers to the scheme are less likely to go for their cards than subscribers seeking to renew their membership due to inconvenience (Asante & Aikins, 2008). Schneider (2004) also argued that a major barrier with health insurance has to do with the technical processes of the scheme. This according to Schneider, renders the scheme not attractive to people.

Schneider (2004) further argued that many health insurance schemes operate within weakly defined political and legal frameworks and are based on

non-written, mutual agreements which are enforced and monitored by members. To Schneider, health insurance managers often lack the managerial and technical capabilities to effectively manage insurance schemes and negotiate appropriately with providers for effective healthcare delivery. These technical challenges therefore discourage some people who see them as disincentives, from either subscribing to the health insurance as new registrants or renewing their membership (Schneider, 2004).

People generally see the cost of subscribing to health insurance to be too high (Boateng & Awunyor-Vitor, 2013). This to such people, serves as a major barrier for them in being members of the scheme. Thus, people generally see the annual premium expected of them to pay before enjoying benefits under the scheme, as a major disincentive. Even people who are not subscribed to the health insurance see the premium for the scheme as very expensive and thereby preventing them from subscribing to it. The implication therefore is that it is not the health insurance package itself that is seen as expensive in its entirety, but the cost of subscribing to the scheme. People's decision to enrol or renew their health insurance membership is largely determined by the cost of doing so, which has been described by Collins et al. (2013) as too expensive.

Arguments by Boateng and Awunyor-Vitor (2013) and Collins et al. (2013) regarding the expensive nature of health insurance premium are consistent with that of Schultz et al. (2013). Schultz et al. argued that people who are not subscribed to health insurance see the cost of the annual premium they would have to pay as the most important factor why they are not subscribed to the scheme. People who are unable to renew their health

insurance after it expires, also give high cost of the annual premium of the scheme as the most important reason why they are unable to renew their membership (Jehu-Appiah, et al., 2011).

Schultz et al. (2013) however noted that household size is a major determinant of people's inability to either register or renew their subscription to health insurance. Thus, the larger the size of a household, the more likely it is for members of that household to see the cost of health insurance premium as being too expensive and thereby preventing them from either subscribing to the scheme as new members or renewing their subscription. The size of a household is considered a major factor which influences the relative expensiveness of health insurance because, the heads of such households usually have to pay for the premium of all members of the household, except those who might be included in the exemption policy of the scheme (Schultz et al., 2013).

The quality of care provided to subscribers under health insurance is also seen to be a major barrier associated with the scheme (Mladovsky & Mossialos, 2008). The level quality of healthcare services provided to subscribers by providers under health insurance goes a long way to enhance the level of confidence that clients have in the scheme and make it very attractive for even non-subscribers to join (Ullah, 2012). Providing high quality health insurance-covered healthcare increases the trust that subscribers have in the health insurance and the healthcare system in general and induces positive or negative perceptions in them regarding the scheme (Mladovsky & Mossialos, 2008).

The quality of services provided under health insurance therefore significantly influences subscription to the scheme (Mulupi et al., 2013). According to Criel and Waelkens (2003), majority of people have negative feelings regarding the quality of care provided them under health insurance. Quality as noted by Criel and Waelkens, comprises adequacy of service delivered to clients, medical equipment, and health care personnel including medical doctors. Thus, the inadequacy of these factors leads to the provision of substandard services which do not satisfy the health expectations of clients (Criel & Waelkens, 2003).

Quality of health care under health insurance with regards to adequacy of services delivered to clients, medical equipment, rooms, and health care personnel is dependent on the insured status of individuals (Arin & Hongoro, 2013). Thus, persons already subscribed to health insurance are more likely than those not subscribed to the scheme, to see the quality of health insurance related health care as negative. This is obvious, as those not subscribed to the scheme may not have experienced any treatment with health insurance and may therefore not be in the best position to assess the level of quality of the scheme (Arin & Hongoro, 2013).

The quality of rooms allocated for in-patients is also seen as an element of the low quality of health care associated with health insurance (Mulupi et al., 2013). According to Mulupi et al., this comprises overcrowded wards, inadequate bedding and worn-out patient uniforms. The overcrowded nature of wards, inadequacy of beds and the deplorable nature of patient uniforms negatively influence the views clients have with regards to the quality of services provided to them. Even those who are not subscribed to health

insurance see wards, beds, and patient uniforms as being in deplorable states and therefore take decisions not to subscribe to the insurance scheme (Mulupi et al., 2013).

Perceived low quality of drugs received by healthcare users when using health insurance for assessing healthcare has been noted as a major barrier associated with the insurance as seen by clients (Dalinjong & Laar, 2013). Dalinjong and Laar argued that people are very often given different drugs when they report illnesses/disease conditions to hospitals with health insurance and with out-of-pocket payments. The drugs given to clients when they use health insurance to access health care are usually of inferior quality compared to those given to the same clients when they access healthcare based on out-of-pocket payments. This creates negative perceptions about the scheme and erodes their confidence in the scheme and thereby consequently influences their subscription to the scheme negatively (Dalinjong & Laar, 2013).

Attitude of health care providers is a major factor which influences subscription to health insurance as well as renewal of membership (Mladovsky & Mossialos, 2008; Criel & Waelkens, 2003). Criel and Waelkens (2003) for instance noted that when attitude of health care providers is negative towards clients with health insurance, it negatively influences their views about services provided and the scheme as a whole. Negative attitude of healthcare providers therefore according to Cried and Waelkens, is seen as a major barrier to subscription to the health insurance.

Negative attitude of healthcare providers comprises poor hospitality, including rudeness and scolding of clients, and discrimination (Mulupi et al., 2013). It also comprises corruption and conflict of interest as well as lack of

interest in the plight of the patient and the willingness to provide them with prompt care. It also entails service providers not showing empathy to the conditions of the patients but rather insulting them. All these discourage potential clients from subscribing to health insurance schemes (Mulupi et al., 2013).

Not only does negative attitude of health care providers negatively influences the decision of non-subscribers to enrol onto the scheme, it also negatively influences the decision of those already subscribed to the scheme to renew their subscription (Arin & Hongoro, 2013). Thus, non-subscribers who see attitude of healthcare providers as negative, decide not to become members of the scheme. Moreover, people who are already members of the health insurance decide not to renew their subscription when they view attitude of healthcare providers as negative (Arin & Hongoro, 2013). In fact, lack of quality of care was argued by Criel and Waelkens (2003) as the most important cause of non-enrolment in the Maliando scheme in Guinea Conakry, reinforced by negative attitude of health care providers.

Adequacy of the benefit package associated with being a subscriber to health insurance is a major factor which influences subscription as well as renewal of health insurance membership (Mulupi et al., 2013). This comprises diseases/health conditions which are treatable with the insurance and the variety of drugs listed on the drug list of the insurance scheme. Mulupi et al. noted that when the benefit packet of health insurance is seen as insufficient by subscribers, it reduces their trust in the scheme, which consequently reduces total subscription to the scheme. Mulupi et al. however argued that inadequate benefit package and high co-payments prevents people from subscribing to

health insurance schemes in Kenya and contributes significantly to drop out rates of health insurance subscription and renewal (Mulupi et al., 2013).

Waiting time has also been noted as a major barrier associated with the health insurance among people (Dalinjong & Laar, 2013; Bruce et al., 2008). Dalinjong and Laar (2013) for instance argue that waiting time associated with health insurance is seen to be too long. Bruce et al. (2008) also stated that health insurance subscribers mainly see waiting times to be long while non-subscribers see them as short. Dalinjong and Laar further stated that a major reason why the uninsured decide not to subscribe to the scheme is the delays in accessing health care as a health insurance subscriber. Bruce et al. even argued that some subscribers to health insurance prefer paying out-of-pocket for services provided them instead of using their health insurance cards as they waste time at the health facility, should they use their cards.

Theoretical Frameworks

Theories reviewed for this study comprise the theory of reasoned action and planned behaviour, healthcare utilisation model and social cognitive theory. Others include Nola Pender's health promotion model, the health belief model and the diffusion of innovation theory.

Theory of Reasoned Action

The theory of reasoned action (TRA) was propounded by Martin Fishbein and Icek Ajzen (1975; 1980). The theory was derived from a previous study which started out as the theory of attitude, leading to the study of attitude and behaviour. "The theory of reasoned action was developed mainly out of frustration with traditional attitude-behaviour research, much of which found

weak correlations between attitude measures and performance of volitional behaviours" (Hale, Householder & Greene, 2003, p. 259). The major constructs of the theory are attitudes, subjective norms and behavioural intentions. Attitudes are the sum of beliefs that people have about a specific behaviour, weighted by an evaluation of these beliefs (Ajzen, Albarracín & Hornik, 2007). Attitude toward a behaviour is also defined as an individual's positive or negative feelings about performing a behaviour (Miller, 2005). It is determined through an assessment of one's beliefs regarding the consequences arising from a behaviour and an evaluation of the desirability of these consequences (Ajzen et al., 2007).

With regards to health insurance, an individual may have the belief that subscription to health insurance may be beneficial in offering them financial protection against ill health, that subscription to health insurance may result in unnecessary delays in accessing healthcare due to long queues, and that subscription to health insurance may result in confrontations with health care providers (Mulupi et al., 2013). Each of these beliefs can be weighted. Thus, health issues may for instance be more important to some individuals than issues of time and comfort. As such, they may decide to subscribe to the health insurance (Atinga, Abekah-Nkrumah & Domfeh, 2011).

Subjective norms focus on the influence of people in an individual's social environment on his/her behavioural intentions. Thus, the beliefs of people, weighted by the importance one attributes to each of their opinions, will influence his behavioural intentions. For instance, an individual may have friends who are already subscribed to the health insurance and therefore encourage him to also join. On the other hand, the individual's spouse might

prefer that the family seeks healthcare out-of-pocket. The beliefs of these people weighted by the importance attributed to each of their opinions by the decider, will influence his behavioural intention to subscribe to the scheme (Fishbein & Ajzen 1980; 1975).

Behavioural intention serves both as a function of attitudes towards a behaviour and subjective norms towards that behaviour, which have been found to predict actual behaviour (Miller, 2005). An individual's attitudes about subscribing to health insurance, combined with the subjective norms about health insurance, each with their own weight, will lead the individual to his intention to subscribe (or not), which will then lead to his actual decision.

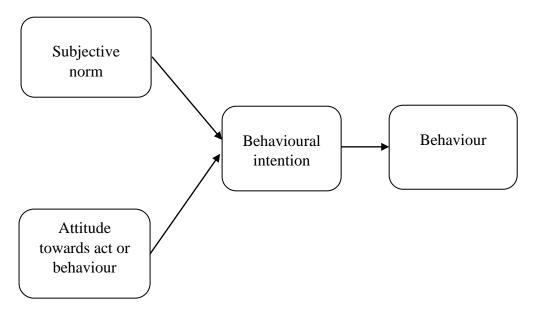


Figure 1: Theory of Reasoned Action

Source: Fishbein and Ajzen (1975)

The theory of reasoned action is considered relevant to this study as it awakes the realization that the way people see health insurance ultimately influences their intentions and subsequently their behaviour towards subscription. Because people's views of the health insurance influence their

subjective norms towards the scheme, educating them on the need to subscribe due to its numerous benefits as a way of changing their beliefs about health insurance, may be a way to positively influence their subjective norms regarding the NHIS.

With a change in beliefs and subjective norms of people in the Cape Coast Metropolis regarding their subscription to the NHIS, their intentions towards the scheme will also change. A positive change of their intentions towards health insurance will therefore result in a change in their behaviour towards subscription to the scheme. Sheppard et al. (1988) disagreed with the theory but made certain exceptions for certain situations when they said "a behavioural intention measure will predict the performance of any voluntary act, unless intent changes prior to performance or unless the intention measure does not correspond to the behavioural criterion in terms of action, target, context, time-frame and/or specificity" (p. 325).

The theory of reasoned action has been very useful in the conduct of research not only in the social sciences, but in other disciplines. Sheppard et al. (1988), for instance, suggested that "more than half of the research to date that has utilized the model has investigated activities for which the model was not originally intended" (p. 338). Sheppard et al. expected in their study that the theory of reasoned action would not fare well in such situations. Sheppard et al. however found the theory to have "performed extremely well in the prediction of goals and in the prediction of activities involving explicit choice among alternatives" (p. 338). Sheppard et al. therefore concluded that the theory of reasoned action "has strong predictive utility, even when utilized to

investigate situations and activities that do not fall within the boundary conditions originally specified for the model" (p. 338).

The theory of reasoned action has, however, been criticised for several reasons. The theory is limited in its significant risk of confounding between attitudes and norms since attitudes can often be reframed as norms and vice versa. Besides, the assumption of the theory of reasoned action that when someone forms an intention to act, they will be free to act without limitation is flawed (Hale et al., 2003). In practice, however, constraints such as limited time, ability, organizational or environmental limits and unconscious habits do limit the individual's freedom to act.

Hale et al. (2003) also accounted for certain exceptions to the theory when they said "the aim of the TRA is to explain volitional behaviours. Its explanatory scope excludes a wide range of behaviours such as those that are spontaneous, impulsive, habitual, the result of cravings, or simply scripted or mindless. Such behaviours are excluded because their performance might not be voluntary or because engaging in the behaviours might not involve a conscious decision on the part of the actor" (p. 250). Due to the numerous challenges of the theory of reasoned actioned, it was subsequently revised and extended by Ajzen (1988) into the theory of planned behaviour.

Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) is a modified and extended version of the theory of reasoned action (TRA) which was developed in 1980 (Cameron, 2010; Fishbein & Ajzen, 1980). Developed by Ajzen (1988), this extension of TRA involves the addition of one major predictor, perceived

behavioural control, to the original theory (Southey, 2011). "This addition was made to account for times when people have the intention of carrying out a behaviour, but the actual behaviour is thwarted because they lack confidence or control over behaviour" (Miller, 2005, p. 127).

The theory of planned behaviour is a theory which predicts deliberate behaviour, because behaviour can be deliberative and planned (Baker & White, 2010). The tenets of the theory are attitudes, which comprise behavioural beliefs and outcome evaluations, subjective norms, which consist of normative beliefs and motivation to comply, and perceived behavioural control which is based on control beliefs and influence of control beliefs as well as behavioural intentions, all of which result in a particular behaviour (subscription to health insurance) (Baker & White, 2010; Payne, Jones & Harris, 2005; Conner & Sparks, 1995).

Attitudes towards a behaviour entail an individual's general assessment of a particular behaviour, which in the case of this study, is subscription to health insurance. Attitude towards a behaviour is assumed to have two elements which work together (Martin, et al., 2010). These are, beliefs regarding the consequences of the behaviour (behavioural beliefs) and the corresponding positive or negative judgements about each of these features of the behaviour (outcome evaluations) (Hoie, Moan & Rise, 2010).

Subjective norms about a behaviour refer to an individual's own estimate of the social pressure exerted on him or her to perform that particular behaviour (subscription to health insurance) (Stone, Jawahar & Kisamore, 2010). Subjective norms, like attitude towards a behaviour, are assumed to have two components which work in interaction. These are beliefs about how

other people who may be in some way important to the person, would like him or her to behave (normative beliefs) and the individual's motivation to comply with these perceived expectations from those who may be in some way important to him or her (Cameron, 2010).

Perceived behavioural control is the extent to which an individual feels capable to act out a behaviour (subscription to health insurance) (Baker & White, 2010). This construct also has two elements according to Ajzen (1988). They comprise the amount of control that an individual has over a behaviour (subscription to health insurance) and how confident he or she feels about being able to perform (subscribe) or not perform (not subscribe) the behaviour (health insurance). Perceived behavioural control is influenced by control beliefs regarding the power of both internal and situational variables to facilitate or militate against the performing of the behaviour (health insurance subscription) (Baker & White, 2010; Stone et al., 2010).

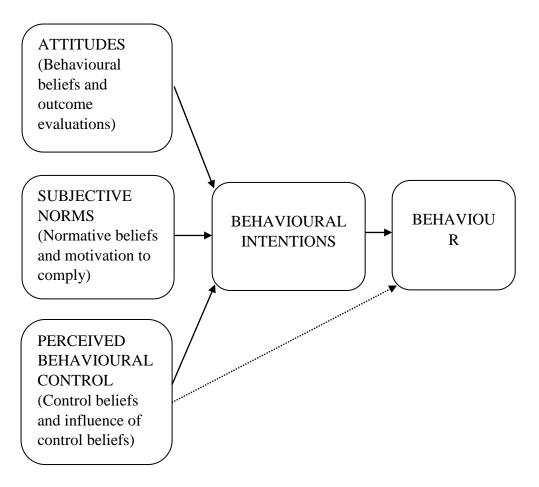


Figure 2: Theory of Planned Behaviour

Source: Ajzen (1991)

The strengths of the theory of planned behaviour lie in its ability to measure how human actions are guided. It also predicts the occurrence of a particular behaviour, provided that behaviour is intentional (Cameron, 2010). It was thus relevant to this study in explaining the factors motivating as well as barriers associated with subscription to the health insurance which culminate into the trends of subscription to the scheme in the Cape Coast Metropolis. Thus, the theory of reasoned action was relevant in explaining how behavioural beliefs and outcome evaluations, normative beliefs and motivation to comply as well as control beliefs and influence of control beliefs influence

behavioural intentions regarding subscription to health insurance, which then consequently result in the decision of people to either subscribe or not subscribe to the NHIS in the Metropolis.

The theory of planned behaviour is, however, limited in a number of ways. Personality/demographic factors for instance are not taken into consideration in explaining factors which influence behaviour (McKinley, n.d.). Ambiguity regarding the measure of perceived behavioural control also creates measurement problems. Not only are unconscious motives not considered in the theory, the assumption that human beings are rational and make systematic decisions on the basis of information available to them is flawed, as this is not always the case (McKinley, n.d.; Cameron, 2010).

Healthcare Utilisation Model

The theory was originally propounded by Anderson in 1972. It was however, subsequently reviewed by Anderson and Newman (1973). The healthcare utilisation model was originally developed to aid investigations into the use of biomedical healthcare services. The main tenets of the theory are pre-disposing, need and enabling factors, which influence utilisation of health services (subscription to health insurance). Thus, the theory describes the roles of predisposing, enabling and need factors in influencing utilisation of healthcare services (Andersen, 2008). Predisposing factors include religion, sex, education, age, previous experience with illness, attitude towards health and knowledge of health (Anderson, 1972).

Anderson (2008) describes the enabling factors as being external to the individual but important in influencing his/her decisions concerning the use of

healthcare services and include the presence of a health care facility within a certain minimum distance, availability of financial resources to the individual and effectiveness of existing health support systems. The need factors according to Anderson, refer to perceptions of the seriousness of a disease or health condition, which include availability of help for care and support. Existing predisposing factors as noted by Anderson, combine with enabling and need factors to influence a person's utilisation of healthcare facilities and services (Wilson, Deane, Ciarrochi & Rickwood, 2005; Anderson & Newman, 1973; Anderson, 1972).

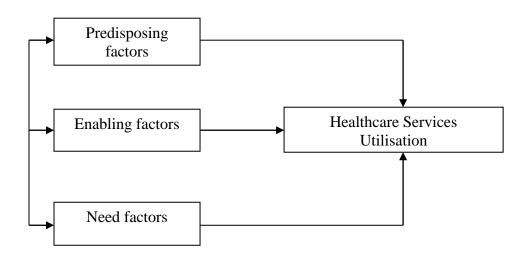


Figure 3: Healthcare Utilisation Model

Source: Anderson (2008)

The theory has been criticised for the fact that it does not pay attention to cultural dimensions and social interactions (Wilson et al., 2005). Also, the model has been criticised for over-emphasising need factors which influence health behaviour instead of social structure and health beliefs, even though Andersen (2008) argued that need, in itself, is a social construct.

Despite these criticisms, the health care utilisation model was considered relevant to the current study because of its strength in spelling out the various factors that may influence subscription to health insurance, which may include the motivational factors and barriers associated with the scheme and being subscribed to it (Harris, McLean & Sheffield, 2009). Thus, with regards to health insurance subscription, the healthcare utilisation model was relevant to this study in helping to identify the influence of factors such as age and attitude of healthcare providers which may either serve as motivation or barriers in the decisions taken by people to either subscribe to the health insurance or not to do so.

Social Cognitive Theory

Miller and Dollard (1941) proposed the social learning theory from which the social cognitive theory evolved. Bandura and Walters (1963) broadened the social learning theory with the principles of vicarious reinforcement and observational learning. Bandura (1977), however, provided the self-efficacy concept, while refuting the traditional learning theory for understanding learning, leading to development of the social cognitive theory (Bandura, 2010; Bandura, Polydoro & Azzi, 2008; Weinberg & Gould, 2007).

The social cognitive theory focuses on cognitive and emotional aspects of behaviour for understanding behavioural change (Bandura, 2009). The theory also explains how people acquire and maintain some behavioural patterns, while also providing the basis for intervention strategies (Bandura, 2011, 2001, 1997). According to Bandura (2010), evaluation of behavioural

change is dependent on three constructs; environmental factors, personal factors and behavioural factors.

Environmental factors according to Bandura (2010), refer to factors that can affect an individual's behaviour. These factors are the social and physical elements of the individual's environment. The social environment includes friends, family members and colleagues who may influence the behaviour of the individual. The physical environment comprises the size of the individual's room, the ambient temperature or the availability of certain foods. Environmental factor according to Parraga (1990) and Bandura (2008), provide the framework for understanding behaviour. The individual's environment therefore provides social support (reinforcement) and opportunities (Santrock, 2008; Glanz, Rimer & Lewis, 2002). Reinforcements refer to responses to an individual's behaviour which decrease or increase the likelihood of reoccurrence. Reinforcements promote incentives and self-initiated rewards (Nabi & Beth, 2009).

Behavioural factors according to Bandura (2010), include skills, practices and the individual's self-efficacy in changing a particular behaviour. Self-efficacy refers to the individual's confidence in performing a particular behaviour. Personal factors also include knowledge, expectations and attitudes of the individual (Bandura, 2010). An important factor is what Bandura (1977) describes as behavioural capability. This means that for an individual to perform a particular behaviour, he or she must know what the behaviour entails and have the requisite skills to perform it (Nabi & Beth, 2009). Important in the social cognitive model also, is observational learning. Observational learning occurs when an individual models the actions of others

and reinforcements that he or she receives (Bandura, 1997). The three factors of the theory (personal factors, environmental factors and behavioural factors) concurrently influence one another. This is termed reciprocal determinism (Bandura, 2011; Glanz et al., 2002).

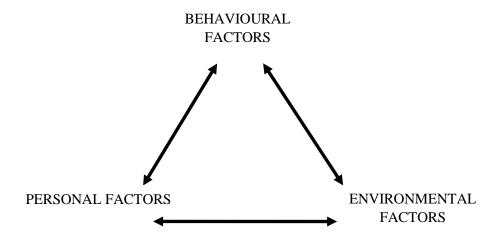


Figure 4: Social Cognitive Theory

Source: Pajares (2002).

The social cognitive theory has been criticised for a number of reasons. The theory posits that changes in environmental factors automatically will lead to changes in personal factors. This is however not always true (Miller, 2005). The theory has also be criticised as being loosely organized and based only on reciprocal determinism of personal, behavioural and environmental factors. The theory does not clarify the extent to which each of these factors result into actual behaviour and whether one is more influential than the other or not. The social cognitive theory does also not pay attention to motivation, other than through references to past experiences (Nabi & Beth, 2009; Miller, 2005).

The strength of the social cognitive theory, however, lies in its ability to explain behavioural patterns. It was, therefore, relevant in explaining why people decide to either subscribe or not subscribe to the health insurance in the Cape Coast Metropolis. Thus, the theory was relevant in explaining the roles of personal factors, environmental factors and behavioural factors in shaping and influencing subscription to health insurance, reinforced by the motivators and barriers associated with subscription to the scheme.

Nola Pender's Health Promotion Model

The model was created by Nola Pender in 1982. It was however revised in 1996. Nola Pender's Health Promotion Model (PHPM) was created to serve as a "multivariate paradigm for explaining and predicting health promoting component of lifestyle" (Pender, 1996, p. 326). There are three major concepts in Pender's model which are further subdivided into more specific concepts (Pender, 1996). The major concepts are individual characteristics and experiences, behaviour-specific cognitions and effect, and behavioural outcome. These concepts have been sub-divided into subconcepts. The sub-concepts of the theory, however, comprise personal factors, immediate competing demands and preferences, perceived barriers to action, perceived self-efficacy, activity related effect, interpersonal influences, situational influences, commitment to plan of action, perceived benefits of action (Pender, Murdaugh & Parsons, 2011).

Personal factors are categorized as biological (comprising variables such as age, gender, body mass index, pubertal status, aerobic capacity, strength, agility, or balance) psychological (comprising variables such as self-

esteem self-motivation personal competence perceived health status and definition of health) and socio-cultural (includes variables such as race ethnicity, acculturation, education and socioeconomic status). These factors are predictive of a given behaviour and shaped by the nature of the target behaviour being considered (Michener, DeLamater & Myers, 2004; McCullagh, Lusk & Ronis, 2002).

Perceived benefits of action according to Pender (1996) have to do with anticipated positive outcomes that will occur from health behaviour while perceived barriers to action are anticipated, imagined or real blocks and personal costs of understanding a given behaviour. Perceived self-efficacy deals with judgment of personal capability to organize and execute a health-promoting behaviour (Robbins, Gretebeck, Kazanis & Pender, 2006). Perceived self-efficacy influences perceived barriers to action so that higher efficacy results in lowered perceptions of barriers to the performance of the behaviour (Shin, Yun, Pender & Jang, 2005).

Activity related affect entails subjective positive or negative feeling that occur before, during and following behaviour based on the stimulus properties of the behaviour itself (Lusk, Kerr, Ronis & Eakin, 1999). Interpersonal influences have to do with cognition concerning behaviours, beliefs, or attitudes of the others. Interpersonal influences include norms (expectations of significant others), social support (instrumental and emotional encouragement) and modeling (vicarious learning through observing others engaged in a particular behaviour). Primary sources of interpersonal influences are families, peers, and healthcare providers (Pender et al., 2011).

Situational influences according to Pender (1996), refer to personal perceptions and cognitions of any given situation or context that can facilitate or impede behaviour. Include perceptions of options available, demand characteristics and aesthetic features of the environment in which given health promoting is proposed to take place. Situational influences may have direct or indirect influences on health behaviour (Pender, Walker, Stromborg & Sechrist, 1990). Commitment to plan of action refers to the concept of intention and identification of a planned strategy leads to implementation of health behaviour. Immediate competing demands and preferences comprise competing demands which are those alternative behaviours over which individuals have low control because there are environmental contingencies such as work or family care responsibilities while competing preferences are alternative behaviours over which individuals exert relatively high control (Robbins, Pis, Pender & Kazanis, 2004; Pender, 1996).

Pender (1996) outlines specific assumptions her model is based on which overall emphasize the fact that the patient has an active role in their health behaviour. It is assumed that a patient can self-reflect, actively seek to regulate behaviour, and initiate behaviours that modify their environment (Ronis, 2006). The health promotion model therefore suggests that each person has unique personal characteristics and experiences that affect subsequent actions (Kerr, Lusk & Ronis, 2002). Health promoting behaviour is the desired behavioural outcome and is the end point in the HPM. Health promoting behaviours as noted by Pender, should result in improved health, enhanced functional ability and better quality of life at all stages of development.

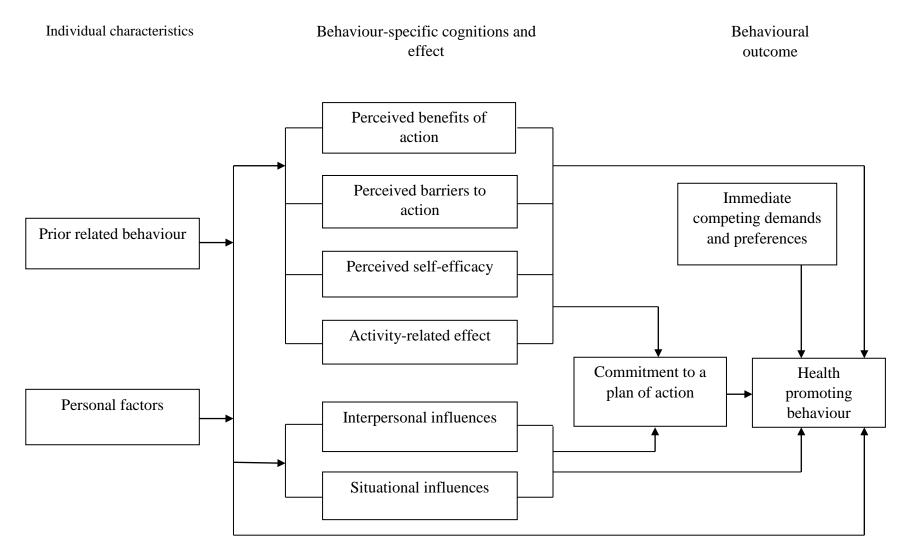


Figure 5: Nola Pender's Health Promotion Model

Source: Pender (1996)

Pender's health promotion model has been criticised for focusing attention only on perceptual and cognitive factors as influencing health while identifying situational, environmental and interpersonal factors as being only important to the extent that they modify perceptual and cognitive influences. Pender emphasized the decision making ability of individuals, their perception of control, and their definition of health as being critical factors. Little attention was however given to the relevance of economic or socio-political context. In addition, the theory was not specified on whether perceptual factors precede behavioural change or result from change (King, 1994). The model has also been critiqued for being focused on preventative, disease-centered, behavioural, and lifestyle-oriented concepts of the health education paradigm rather than addressing broader concepts of the health promotion paradigm (Whitehead, 2009).

Despite the limitations of the model, it was considered relevant to this study due to its strength in assessing an individual's background and perceived perceptions of self among other factors, to predict health behaviours which in the case of the present study, is subscription to the National Health Insurance Scheme. Thus, the theory was relevant in enabling the study to identify the individual characteristics, behaviour-specific cognitions and effect and how these culminate into health insurance subscription.

Health Belief Model

The Health Belief Model was propounded by Irwin Murray Rosenstock (1966). The model has four traditional constructs. These are perceived seriousness, perceived susceptibility, perceived benefits and perceived barriers. Perceived seriousness outlines an individual's belief regarding the seriousness or severity of a health problem and may come from beliefs the person has about the difficulties a disease or health condition would create or the effects it would have on his or her life in general (Cottrell, Girvan & McKenzie, 2006).

Perceived susceptibility refers to the perceived personal risk of developing a health problem or disease. Perceived susceptibility is very effective in prompting people to adopt healthier behaviours. The higher or greater the perceived risk, the more likely it is for an individual to engage in a behaviour to decrease the risk (Chen, Fox, Contrell, Stockdale & Kagawa-Singer, 2007; Ali, 2002). A combination of perceived seriousness and perceived susceptibility results in perceived threats. The construct of perceived benefits according to the model, deals with a person's view of the importance of a new behaviour in reducing the risk of developing a disease or health condition.

People thus decide to adopt healthier behaviours when they believe that the new behaviour will reduce their chances of developing a disease or health problem (Carpenter, 2010). Perceived barriers involve an individual's own evaluations of the obstacles in his or her way in adopting a new behaviour. In order for a new behaviour to be adopted, a person needs to believe that the benefits of the new behaviour outweigh the consequences of continuing the old

behaviour (Cottrell & McKenzie, 2005). This enables barriers to be overcome and the new behaviour to be adopted (Turner, Hunt, Dibrezzo & Jones, 2004).

The four main constructs of perceived susceptibility, benefits, seriousness and barriers are modified (influenced) by other factors which are termed as modifying variables. Modifying variables are mainly the demographic and socio-psychological characteristics of the individual and include age, sex, culture, level of education, personality, social class, past experience, peer pressure, skills and motivation (Chen et al., 2007; Cottrell & McKenzie, 2005; Rosenstock, 1974).

Modifying variables basically influence the way an individual perceives certain health situations (Karen, Rimer & Viswanath, 2008). Thus, an individual's level of education, age, sex and social class may increase his or her perception of the susceptibility to a health condition and the seriousness attached to it as well as the barriers and benefits attached to changing a health behaviour (Hayden, Cottrell & Berhardt, 2008) In addition to susceptibility, seriousness, barriers and benefits as well as modifying factors, another factor which also influences an individual in adopting a health behaviour is cues to action (Glanz & Bishop, 2010).

Cues to action refer to people, events or things that cause or move individuals to change their behaviour. These may include illness of a family member, reminder postcards, mass media campaigns/reports and advice from others (Glanz & Bishop, 2010; Davison, Vreede & Briggs, 2005; Graham, 2002). For instance, if someone contracts a disease, he or she may not perceive it as serious to seek health care but upon watching a report on television of another person dying of that same condition, he or she will then perceive her

condition as serious and would then want to seek preventive care. Self-efficacy was added to the health belief model in 1988 (Rosenstock, Strecher & Becker, 1988). Self-efficacy has to do with the belief in one's own ability to do something (Hayden et al., 2008). Thus, individuals do not usually try doing something new until they think they can actually do it.

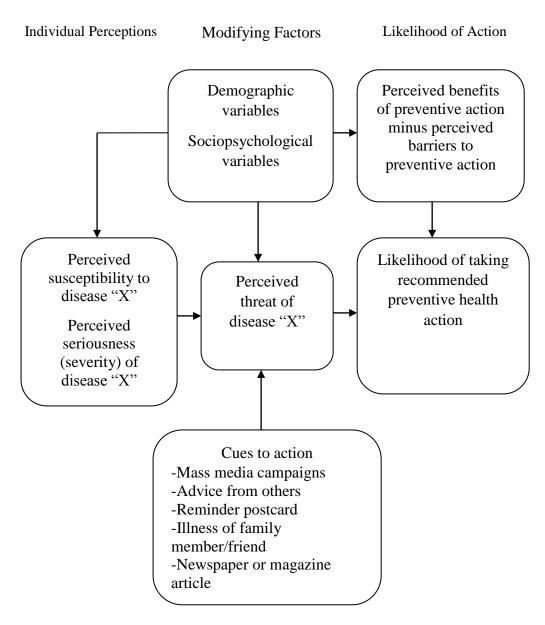


Figure 6: Health Belief Model

Source: Cottrell, Girvan and McKenzie (2006)

The health belief model has been criticised for several reasons. First, very little work has been done on quantification of the relations among the variables comprising the model. Karen and Donald (2010) for instance argued that there has been no attempt to delineate the precise, numerical relations among perceived susceptibility, severity, benefits, barriers and self-efficacy. Also, the model focuses on perceptual factors such as beliefs and failures to account for variance in behaviour that might be due to such salient factors as personal habits and socio-cultural norms (Cottrell et al., 2006). Thus, the theory focuses on attitudes and beliefs rather than behaviours and reality (Hay, et al., 2003).

Despite the criticisms of the health belief model, it has been very useful in the conduct of research and has as such, been applied in many fields of study. This is due to its strength in predicting the health behaviour of people (Cottrell & McKenzie, 2005). Turner et al. (2004) for instance applied the health belief model to the design and implementation of an osteoporosis prevention programme for middle-aged women. Turner et al. applied the model to brainstorm and identify possible perceptions of susceptibility, seriousness, barriers and benefits that explain why some women do not engage in osteoporosis preventive behaviours and the possible modifying factors and cues to action that might change that behaviour.

Turner et al. concluded that the respondents showed increased perceived susceptibility, perceived severity, self-efficacy perceived benefits and cues to action while showing decreased perceived barriers; actions which encouraged participation (Turner et al., 2004). Kim, Ahn and No (2012) also investigated how beliefs relating to nutrition influence the desire of college

students to be healthy. Using the Health Belief Model, Kim et al. sought to investigate the health behaviour of the students, ascertain the motives of eating behaviour and physical activity and assess if the underlying factors are in anyway, related to one another (Kim et al., 2012). Kim et al concluded that knowledge of nutrition results in an increased nutritional confidence. The authors also argued that nutrition confidence also influences health beliefs and positive health beliefs lead to an increase in behavioural intention to eat healthy food and to perform a physical activity.

Asci and Sahin (2011) also conducted a study which sought to determine the beliefs, attitudes and behaviours of mothers who accompany their children to the health facility for problems related to breast health and to determine the effects of a breast health programme based on health belief model and breast health perceptions and behaviours related to screening. Asci and Sahin concluded that prior to the application of health belief model-based breast health programme, less than half of the mothers made breast self-examination. Three months after the breast health programme however, the rate increased to 78.4 percent (Asci & Sahin, 2011).

The Health Belief Model is considered relevant to health insurance subscription in the Cape Coast Metropolis. Individuals in the Metropolis for instance, are likely to subscribe to health insurance if they consider their self-rated health as low and as such see it serious enough to subscribe to the insurance so that they do not get constrained and frustrated in accessing healthcare, especially financially when their health deteriorates (Jacqueline, Daheia & Raynard, 2011; Shadbolt, 2011).

Perceived susceptibility refers to the risk of falling ill and probably not getting any funds to access healthcare which may lead to deterioration in health and even death and as such, the decision to subscribe to the National Health Insurance Scheme (Reiff, Zakut & Weingarten, 2011). The views of residents of Cape Coast Metropolis with regards to the seriousness of their health and the risk of dying if they fall sick and do not have health insurance to access health care may serve as threats to their health. The more severe they realize the threat pose to their life if they do not have health insurance, the more likely it is for them to either register with the NHIS or renew their subscription (Franks, Clancy, Gold & Nutting, 2011).

People in the Cape Coast Metropolis are likely to subscribe to the health insurance if their motivation to subscribe to the scheme outweigh the barriers involved in being an NHIS subscriber (Wilper, Woolhandler, Lasser, McCormick, Bor & Himmelstein, 2009). Thus, people will only subscribe to the health insurance if for instance, they see the benefits of not needing to borrow money from friends and family to pay for hospital treatment when they and/or their relatives fall sick (a form of financial protection against unforeseen health challenges/problems) (Mulupi et al., 2013). They may also decide to subscribe to the scheme when affordability of the scheme is seen to outweigh the challenges of being in long queues when they want to access health care using health insurance and inconvenience posed to them by the location of offices of the NHIS, which in this case, serve as the perceived barriers to subscription (Nguyen, Rajkotia & Wang, 2011).

Modifying factors such as age, sex, religion, level of education, personality, social class, past experience with the NHIS, peer pressure, skills

and motivation may influence the decisions of residents of Cape Coast Metropolis to either subscribe to the NHIS or not (Duku, Fenenga, Alhassan & Nketiah-Amponsah, 2013; Mhere, 2013). For instance, people with high levels of education may have a higher outlook with regards to the necessity of being ready for any unforeseen health challenges and as such their decision to register with the NHIS, as opposed to those with lower or no level of education who may not realise the level of threat that will be posed to their health and life if they are not prepared financially for any unforeseen health problems and they eventually occur (Mhere, 2013).

With regards to age, young people may feel that they are healthy and may therefore consider their self-rated health as high (Franks et al., 2011). As such, they may not see the importance of subscribing to the health insurance to avert any financial constraints they may face when they fall sick. The aged may however recognize the debilitating nature of their health and as such subscribe to the health insurance scheme (Shadbolt, 2011). Moreover, people in the highest wealth quintile may not see the need to subscribe to health insurance as they may consider their financial ability to afford the cost of health care should they fall sick as high. People in the lowest wealth quintile may however see the need to subscribe to the health insurance upon awareness of the fact that they may even die if they fall sick as they may not be able to afford the cost of healthcare out-of-pocket (Asuming, 2013; Kumi-Kyereme & Amo-Adjei, 2013).

Cues to action including illness of a family member, reminder postcards, mass media campaigns/reports and advice from others may influence people to subscribe to the NHIS (Ar-yuwat, Clark, Hunter & James,

2013). For instance, if a family member of some residents falls sick and the family is unable to meet the cost of health care out-of-pocket and has to either sell off their properties to treat the person or that the relative dies as a result of the family's inability to pay for his or her treatment, surviving relatives may take a cue from that and register with the scheme or renew their subscription in order to avert similar occurrences in the future (Ar-yuwat et al., 2013; Schultz et al., 2013; Basaza et al., 2008).

Moreover, individuals may be adamant with regards to subscription to the scheme and may never even consider registering to it. This may be influenced by their level of seriousness and susceptibility to unforeseen health challenges, which may be low (Ayo-Yusuf, Ayo-Yusuf & Olutola, 2013). However, upon advice from others who probably have subscribed to the scheme and bear witness to the fact that its benefits outweigh the barriers associated with it, they may decide to subscribe to the scheme (Ayo-Yusuf et al., 2013). Advertisements placed on radio and television stations with regards to the benefits of the NHIS and how it has saved many lives, may also influence people in the Cape Coast Metropolis to subscribe to the scheme (Carman & Eibner, 2014). Peoples ability to subscribe or not and the factors influencing such decisions are likely to have played contributory roles in shaping the trends of NHIS subscription in the Cape Coast Metropolis from 2005 to 2014.

Diffusion of Innovation Theory

Diffusion of Innovation (DOI) Theory was propounded by Everett Mitchell Rogers in 1962. It originated from communication to explain how over time, a product or idea gains momentum and diffuses through a social system. The theory focuses on innovation as an agent of behaviour change. Innovation was thus defined as "an idea, practice, or object perceived as new" (Rogers 2003, p. 12). Consequently, it is the perceived attributes of an innovation that determine its rate of adoption to a greater extent than the characteristics of the adopters (Greenhalgh, Robert, Macfarlane, Bate & Kyriakidou, 2004). Rogers (2003) noted that "diffusion is a process in which an innovation is communicated through certain channels over time among the members of a social system. It is a special type of communication in that the messages are concerned with new ideas" (p. 15).

Diffusion of Innovation Theory posits four main elements of behaviour change. These are innovation, communication channels, time, and social systems (Rogers 2003, pp. 11-38). Much diffusion involves technological innovations (Prell, Hubacek & Reed, 2009; Rogers, 2003). As such, Rogers usually made use of the word "technology" and "innovation" as synonyms. According to Rogers, "a technology is a design for instrumental action that reduces the uncertainty in the cause-effect relationships involved in achieving a desired outcome" (p. 13). Technology comprises two parts; hardware and software. While hardware is "the tool that embodies the technology in the form of a material or physical object," software is "the information base for the tool" (Rogers, 2003, p. 259).

Communication channels are important in the diffusion process. According to Rogers (2003), communication is "a process in which participants create and share information with one another in order to reach a mutual understanding" (p. 5). This communication occurs through channels between sources. Rogers states that "a source is an individual or an institution that originates a message. A channel is the means by which a message gets from the source to the receiver" (p. 204). Rogers noted that diffusion is a specific kind of communication and includes these communication elements: an innovation, two individuals or other units of adoption, and a communication channel.

According to Rogers (2003), including the time dimension in diffusion research illustrates one of its strengths. The innovation-diffusion process, adopter categorization, and rate of adoption all have time dimensions. The social system is the last element in the diffusion process. Rogers (2003) defined it as "a set of interrelated units engaged in joint problem solving to accomplish a common goal" (p. 23). Since diffusion of innovations takes place in the social system, it is influenced by the social structure of the social system.

There are five major factors which influence adoption of an innovation (Wright, 2004; Rogers, 2003). These factors are relative advantage, compatibility, complexity, triability and observability. Relative advantage refers to the extent to which an innovation is seen by people as better than the idea, programme, or product which it replaces. Compatibility deals with how consistent the innovation is with the experiences, values and needs of intended adopters. Complexity refers to the level of difficulty associated with

understanding and use of the innovation. Triability refers to the extent to which the new idea (innovation) can be experimented or tested prior to the commitment to adopt it. Observability also refers to the extent to which the innovation provides abstract (tangible) results (Greenhalgh et al., 2004; Rogers, 2003).

The innovation-decision process was described by Rogers (2003) as "an information-seeking and information-processing activity, where an individual is motivated to reduce uncertainty about the advantages and disadvantages of an innovation" (p. 172). The innovation-decision process involves five steps. These knowledge, persuasion, decision. are implementation and confirmation. These stages typically follow each other in a time-ordered manner. The innovation-decision process starts with the knowledge stage. At this stage, an individual learns about the existence of an innovation and seeks information about it. At this stage, the person attempts to determine "what the innovation is and how and why it works" (Rogers, 2003, p. 21). According to Rogers, the questions form three types of knowledge; how-to-knowledge, awareness-knowledge and principles-knowledge.

The persuasion stage occurs when the individual has a positive or negative attitude towards the innovation. However, "the formation of a favourable or unfavourable attitude toward an innovation does not always lead directly or indirectly to an adoption or rejection" (Rogers, 2003, p. 176). The individual at this stage, shapes his or her attitude after he or she learns about the innovation. The level of uncertainty the individual has about the innovation's functioning and the social reinforcement from others including peers, family members and colleagues, influence his beliefs and opinions

about the innovation. At the decision stage, the person decides to adopt or reject the innovation (Rogers, 2003).

While adoption refers to "full use of an innovation as the best course of action available," rejection refers to "not to adopt an innovation" (Rogers, 2003, p. 177). If an innovation has a partial trial basis, it is usually adopted more quickly, since most individuals first want to try the innovation in their own situation and then come to an adoption decision. Rogers noted that rejection is possible in every stage of the decision-making process. Rogers identified two types of rejection; passive rejection and active rejection. In an active rejection, the individual tries an innovation and thinks about adopting it but later decides not to adopt. With regards to passive rejection, the individual does not even think about adopting the innovation at all in the first place (Rogers, 2003).

At the implementation stage, the innovation is put into practice. Rogers noted that there is sometimes uncertainty about the outcomes of the innovation which can be a problem at this stage. The implementer of the innovation may thus need assistance technically from change agents and others to reduce the degree of uncertainty about the consequences. Moreover, the decision-making process will end, because "the innovation loses its distinctive quality as the separate identity of the new idea disappears" (Rogers, 2003, p. 180). Reinvention according to Rogers, usually occurs at the implementation stage, which makes it an important component of this stage. Rogers defined reinvention as "the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation" (Rogers, 2003, p. 180).

At the confirmation stage, the decision to adopt an innovation has already been made. At this stage however, the individual searches for support for his or her decision. Rogers (2003) noted that the individual's adoption decision can be reversed if he or she is "exposed to conflicting messages about the innovation" (p. 189). The individual however, tends to stay away from these messages and seeks supportive messages that confirm his or her decision. Attitudes thus become much more crucial at this stage. Based on the support the individual receives for adoption of the new idea (innovation) and his/her attitude, later adoption or discontinuance happens during this stage.

Discontinuance may occur during this stage in two ways. First, the individual rejects the innovation to adopt a better innovation replacing it. This type of discontinuance decision is called replacement discontinuance. The second type of discontinuance decision is disenchantment discontinuance (Rogers, 2003). In disenchantment discontinuance, the adopter rejects the innovation because he or she is not satisfied with its performance or that the innovation does not meet his/her the needs.

According to Rogers (2003) receiver variables serve as antecedents to the adoption of an innovation. These include personality characteristics, which mainly comprise attitude towards the innovation, social characteristics, and perceived need for the innovation. Thus, the perceptions of an individual in general, influence how that individual would perceive an innovation which had been introduced into a system. The age, sex, level of education, religion and other social variables also influence the adoption of an innovation. Moreover, the individual is likely to adopt an innovation when he or she realizes the need to adopt such an innovation. These receiver variables according to Rogers,

influence the knowledge, persuasion, decision and confirmation of regarding an innovation. Process as indicated in the theory, basically involves also the various factors and stages that an individual pass in order to adopt and innovation while the consequences depict the outcome of the processes which the individual goes through in order to adopt an innovation. In the end, this can either result in adoption or rejection.

There are five categories of adopters (Rogers, 2003). These are innovators, early adopters, early majority, late majority and laggards. Innovators are those who want to be first in trying an innovation. They are always interested in new things and venturesome. Innovators are always ready and willing to take risk. Very little, if anything at all, needs to be done to appeal to this category of people in adoption of a new innovation. Innovators constitute about 2.5 percent of a population.

Early adopters are people who represent opinion leaders. They enjoy leadership roles, and embrace change opportunities. They are already aware of the need to change and so are very comfortable adopting new ideas. Strategies to appeal to this population include how-to manuals and information sheets on implementation. Early adopters do not need information to convince them to adopt a new innovation. They constitute about 13.5 percent of a population (Rogers, 2003).

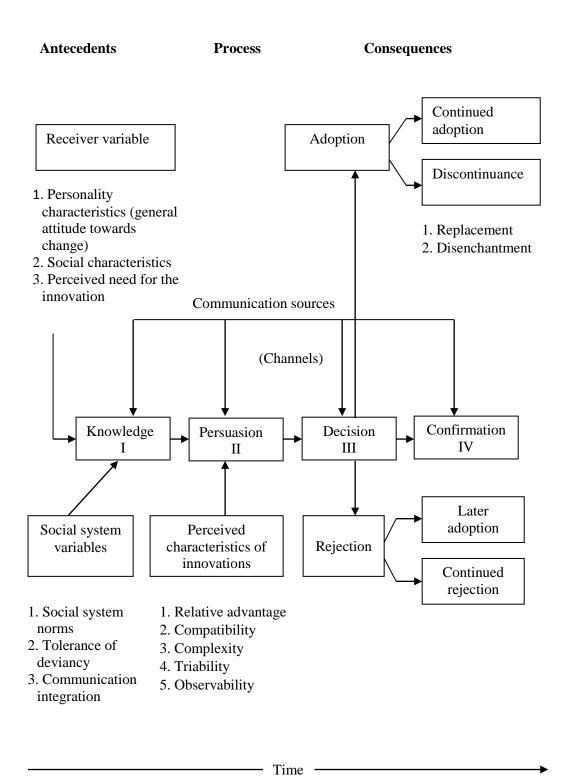


Figure 7: Diffusion of Innovation Model

Source: Rogers (2003)

The early majority are people who are rarely leaders. These people however do adopt new ideas before the average person does. They however have to see evidence that the new idea (innovation) works before they take the decision to adopt it. Strategies which appeal to the early majority include success stories and evidence of the effectiveness of the innovation. Early majority constitute about 34 percent of a population (Rogers, 2003).

The late majority are people who are very sceptical of change. These people will therefore, only adopt an innovation after it has been tried by majority of the population. Strategies that appeal to this population therefore include information on the number of people who tried and successfully adopted the innovation. The late majority constitute about 34 percent of a population (Rogers, 2003).

The last category of adopters are laggards. Laggards are bound by tradition and as such, are very conservative. They are very sceptical of any new idea and are the most difficult group to bring on board. Strategies which appeal to laggards include fear appeals, statistics and pressure from people in the other adopter groups. They may however, never accept and adopt the innovation (Rogers, 2003).

Rogers (2003) further grouped the five adopter categories into two main groups; earlier adopters and later adopters. Earlier adopters comprise innovators, early adopters and early majority while later adopters consist of late majority and laggards. Rogers identified the variations between these two groups in relation to personality variables socio-economic status and communication behaviours, which are related to innovativeness. For example "the individuals or other units in a system who most need the benefits of a new

idea (the less educated, less wealthy, and the like) are generally the last to adopt an innovation" (Rogers, 2003, p. 295).

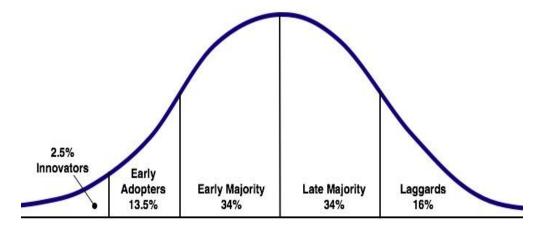


Figure 8: Adopter Categorization on the Basis of Innovativeness

Source: Rogers (2003)

There are several limitations of the diffusion of innovation theory. These include the fact that the theory does not consider a participatory approach to the adoption of an innovation but focuses on individuals' singular decisions to adopt a new idea. Moreover, the theory does not take into consideration, the resources or social support of the individual in adopting a new behaviour (or innovation) (Nybakk, Crespell, Hansen & Lunnan, 2009).

Despite these limitations, diffusion of innovation theory has been used successfully in many fields including agriculture, communication, criminal justice, public health social work and marketing (Rametsteiner & Weiss, 2006). In public health for instance, it is used to accelerate the adoption of important public health programmes that typically aim to change the behaviour of people.

Conceptual Framework

Diffusion of Innovation (DOI) Theory was adopted as the conceptual framework for this study. In relation to health insurance subscription, the four main elements of behaviour change posited by the theory (innovation, time, communication channels and social systems) play important roles in people's decisions to subscribe to the scheme (Rogers, 2003). The nature of the health insurance (innovation) in itself may either serve as a barrier or motivation for people to subscribe to the scheme. The time at which individuals receive information concerning the scheme, as well as its barriers and motivations also influence their decision to subscribe (Rogers, 2003).

This, therefore, makes communication channels used by the National Health Insurance Authority, for instance, to advertise the scheme very significant and important. In the end, individuals in the Metropolis (social system) may either subscribe (adopt) to the scheme or not subscribe to it (reject). Depending on these four factors (innovation, time, communication channels and social systems) again, individuals who initially rejected the scheme may later adopt it or continue to reject it. The decision to subscribe to the scheme may also be influenced by the individual's level of knowledge on the scheme which leads to him or her developing a positive or negative attitude towards the insurance (persuasion). Depending on how persuaded the individual is, he or she then decides to subscribe to the scheme. After taking the decision to subscribe to the scheme however, the individual searches for support for his or her decision. The individual's decision to subscribe can be reversed if he or she is exposed to conflicting messages about the insurance (Rogers, 2003).

Important factors in the decision making regarding health insurance subscription include; who makes the decision; and whether the decision is made freely and implemented voluntarily (Rogers, 2003). Based on these considerations, three types of innovation decisions may apply to NHIS subscription. These are, optional innovation decision, collective innovation decision and authority innovation decision (Rogers, 2003). With optional innovation decision, the decision to subscribe to the health insurance is made by an individual who is in some way distinguished from others in the Metropolis. With regards to collective innovation decision, the decision to subscribe or not subscribe to the NHIS is made collectively by all individuals of a household/family. In relation to health insurance subscription, authority innovation decision is made for an entire family or household by a few individuals in positions of influence or power, preferably the head of household/family (Greenhalgh, et al., 2004).

As indicated by Rogers (2003), there are different categories of people in the Cape Coast Metropolis on the basis of innovativeness and as such, their ability to subscribe to the scheme. Residents of the Metropolis in this regard could be classified as innovators, early adopters, early majority, late majority and laggards. Innovators are the first individuals in the Cape Coast Metropolis to subscribe to the NHIS. These residents are willing to take risks, are youngest in age, have the highest social class, have great financial liquidity, are very social, and have the closest contacts and interaction with other innovators. Risk tolerance has them subscribing to the health insurance first (Rogers, 2003).

Early adopters are the second fastest group of individuals to subscribe to the NHIS. These residents of the Metropolis have the highest degree of opinion leadership compared to other residents. Early adopters are typically younger in age, have a higher social status, have more financial liquidity, possess high levels of education, and are more socially forward than late adopters. They are more discrete in the decision to subscribe to the scheme than innovators, as they realise that judicious choice of subscription will enable them maintain a central communication position (Rogers, 2003).

The early majority constitute residents of the Cape Coast Metropolis to subscribe to the NHIS after a varying degree of time. Their time of subscription is much longer than with the innovators and early adopters. Residents of Cape Coast Metropolis, who fall within this category of potential NHIS subscribers, tend to be much slower in the decision to subscribe, have social status considered to be above average, have contacts with early adopters who may motivate or discourage them to subscribe (Rogers, 2003).

Residents of the Cape Coast Metropolis, who fall within the category of late majority, comprise individuals who will subscribe to the NHIS at the time that the average member of the society does (Rogers, 2003). These residents approach subscription to the NHIS with a high degree of skepticism. The late majority typically have very little financial liquidity, which may even be a reason for their inability to subscribe to the scheme much earlier. They also share contacts with others in the late majority and the early majority, who may be important influences on their decisions to subscribe.

Laggards constitute the group of individuals in Cape Coast Metropolis, to be the last to subscribe to the NHIS. Laggards typically tend to be focused

on traditions and have the lowest financial liquidity, which may even serve as an important reason why they are even the last to subscribe to the scheme Due to limited financial resources and the lack of awareness-knowledge of innovations, they first would want to make sure that the NHIS works before they adopt. Thus, they tend to decide after looking at whether the scheme is successfully adopted by other members of the Metropolis in the past (Rogers, 2003).

There are usually cost-benefit analyses conducted by an individual before finally taking the decision to subscribe to the health insurance (Nybakk et al., 2009). The benefits of an innovation obviously refer to the positive consequences, which serve as motivation for subscription while the costs refer to the barriers hindering subscription. Direct costs are usually related to financial uncertainty and the economic state of the potential subscriber. Indirect costs may be social, such as social conflict caused by subscription (Mhere, 2013).

The potential subscriber to the health insurance basically weighs the costs (barriers) of subscribing to the scheme against the benefits (motivations) of doing so (Schultz et al., 2013). If the motivation to subscribe outweighs the barriers, the individual is likely to subscribe to the scheme. On the other hand, the individual may decide not to subscribe to the scheme if the barriers to subscription outweigh the motivation to subscribe or to renew membership (Duku et al., 2013). In line with the diffusion of innovation theory, the decision to subscribe to the NHIS is bound by time. This may therefore, reflect in the trends of health insurance subscription in the Metropolis with the trends

expected to be higher with time, as more and more people decide to subscribe to the scheme after innovators have done so.

CHAPTER THREE

METHODOLOGY

Introduction

This chapter discusses the philosophy guiding the study. It also presents the study area, design, sources of data, target population, sampling procedure as well as data collection instruments and methods of the study. The chapter also discusses pre-testing of the research instruments. Ethical considerations including informed consent, privacy and anonymity of respondents are also presented. The chapter finally discusses the data processing and analysis procedure which was adopted in this study.

Study Area

The setting of the study was the Cape Coast Metropolis. Cape Coast Metropolis lies within latitudes 50°07 North and 50°20 North of the Equator and between longitudes 1°11 West and 1°41 West of the Greenwich Meridian. The Metropolis is bounded to the West by the Komenda-Edina-Eguafo-Abrem Municipality, to the East by the Abura-Asebu-Kwamankese District, to the North by the Twifu/Hemang/Lower Denkyira District and to the South by the Gulf of Guinea. There are 84 communities in the Metropolis which covers an area of 122 square Kilometres (Cape Coast Metropolitan Assembly [CCMA], 2014).

Communities in the Metropolis include Pedu, Abura, Ola, UCC, Ekon, Nkanfua, Kakumdo, Effutu, Akotokyere, Kwaprow, Ankaful, Essuekyir Anto, Kokoado, Amamoma, Nyinasin, Duakor, Mpeasem and Amisano. The Cape Coast Metropolis is also the capital of the Central Region of Ghana.

According to the 2010 population and housing census of Ghana, the total population of Cape Coast Metropolis is 169,894 out of which 82,810 are males and 87,084 are females (Ghana Statistical Service [GSS], 2013).

There are both private and government health facilities in the Metropolis. With regards to government facilities, Cape Coast Metropolis is mainly served by the metropolitan hospital with the teaching hospital serving mainly as a referral point. The University of Cape Coast (UCC) and Ewim hospitals as well as Adisadel clinic supplement efforts of the metropolitan hospital. There are 11 private health facilities in the Cape Coast Metropolis. These include the Planned Parenthood Association of Ghana (PPGA) clinic, Baiden Ghartey Hospital, Sanford World Clinic (Micro) and Dis Clinic. To improve access to health services, the Metropolis is divided into five subdistricts. These are Adisadel, UCC, Ewim, RCH/Central, and Efutu subdistricts. At the community level there are over 67 trained Traditional Birth Attendants (TBAs) and 82 community based surveillance volunteers in the Metropolis (CCMA, 2014).

Cape Coast Metropolis was chosen as the setting of this study because first of all, available data from the NHIA indicates that the Central Region, of which Cape Coast Metropolis is the capital, recorded the least regional percentage subscription to the NHIS for 2010, 2011 and 2012. For instance, it recorded the lowest percentage coverage of its population with 23 percent in 2010 and 24.6 percent in 2011 (NHIA, 2011; 2010). Besides, the study seeks to examine the trends of insurance subscription from 2005 to 2014 and Cape Coast Metropolis has available data on the scheme from 2005 to 2014. Thus,

other districts and municipalities in the region became fully operational after 2005 and therefore did not possess the required data needed for this study.

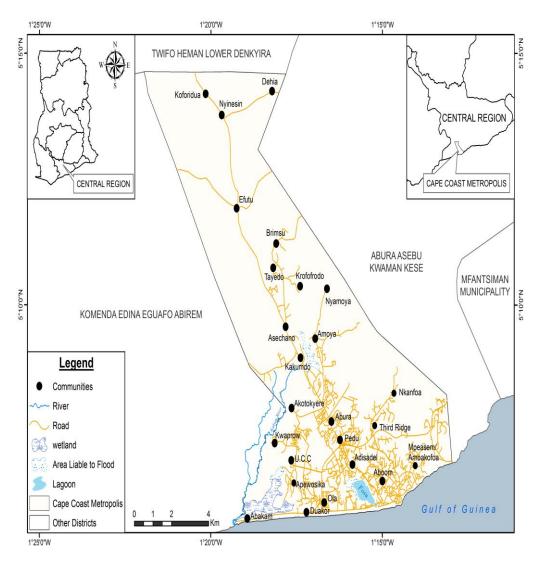


Figure 9: Map of Cape Coast Metropolis

Source: Department of Geography and Regional Planning, UCC (2014)

Research Philosophy

The study was guided by interpretivism and positivism (Khan, 2012; Rajasekar, Philominathan & Chinnathambi, n.d.). While positivism guides the conduct of quantitative research, interpretivism forms the basis of qualitative research. Positivism is the concept that points of view have absolute validity or

truth (Merriam, 2009). With interpretivism, however, there is no objective reality which can be discovered by researchers and replicated by others; a sharp contrast to the assumptions of positivism. As such, an interpretivist perspective is based on the idea that qualitative research efforts should be concerned with revealing multiple realities as opposed to searching for one objective reality (Bernard & Ryan, 2010). The research adopted a mixed method comprising both qualitative and quantitative research.

Research Design

The study adopted a descriptive approach as its design in addressing the first specific objective. For the second and third objectives however, explanatory design was adopted. The descriptive design was used to gather information about an existing situation regarding subscription to the NHIS, with emphasis on describing the trends of subscription (Arpoh-Baah, 2011). The descriptive design was used, as it is advantageous in its flexibility as a design for either quantitative or qualitative research or both, and gives the researcher much options in selection of instruments for data collection (Arpoh-Baah, 2011; Hardon, Hodgkin & Fresle, 2004).

The explanatory approach to research was used to explain subscriptions to health insurance in the Cape Coast Metropolis (Maxwell & Mittapalli, 2008). An explanatory design therefore enabled the present study to ascertain the reasons people subscribe to the health insurance or not, which are the motivational factors and barriers to subscription (Giorgi, 2009; Smith, Flowers & Larkin, 2009; Levin, 2006; Jamrozik, 2004).

Sources of Data

Both secondary and primary data were sourced for this study. Data on trends of health insurance subscription in the Cape Coast Metropolis, from 2005 to 2014, were obtained from records of the NHIA. Data for this study were also sourced from respondents during data collection with regards to their perceptions of the motivating factors and barriers to NHIS subscription in the Metropolis.

Target Population

The target population for this study were residents of Cape Coast Metropolis, who were eighteen years and above at the time of the study. This inclusion criteria was used because the least age for paid subscription to the NHIS is 18 years (NHIA, 2012). As children are expected to be under the guidance of their parents or guardians, their health-seeking decisions including subscription to the NHIS may be determined by these parents and guardians. Records of NHIS subscription also constituted the target of data collection for the study.

Sample Size and Sampling Procedure

For the quantitative aspect of the study, particularly in relation to trends of National Health Insurance Scheme subscription, all records of subscription to the scheme in the Metropolis for the nine-year period under review (2005 to 2014) were sampled from among records kept by the National Health Insurance Authority (NHIA) in the Cape Coast Metropolis.

Thirty (30) respondents were selected to form the sample size of the qualitative aspect of this study. This was however based on saturation (Mason,

2010). Thus, after interviewing fifteen subscribers and fifteen non-subscribers, the barriers and motivators being mentions were becoming virtually the same. The sample size was therefore limited to thirty respondents. The use of fifteen subscribers and fifteen non-subscribers was to ensure easy comparison between the two groups.

For the qualitative aspect of this study, respondents were sampled purposively (Tran, 2013; Laerd Dissertation, 2012; Latham, 2007; Tongco, 2007). The use of purposive sampling was to ensure that only those 18 years and above were selected as research participants. It was also to ensure that both NHIS subscribers and non-subscribers were included in the study. Residents were visited at their work places and homes and those who consented, were included.

In all, 15 communities were visited for the inclusion of respondents in the study. In each of the communities, one subscriber and one non-subscriber were interviewed. The communities were; 4th Ridge, Abura, Amamoma, Akotokyir, Kingsway, Kotokoraba, Ankaful, Brofoyedur, Bakaano, Esuekyir, Kwaprow, Kokoado, Aquarium, Pedu and Amisano.

All records relating to the trends of health insurance were however included in the quantitative aspect of the study. Data collection on the trends of insurance subscription with the checklist was conducted at the NHIS office located at Abeasie (a suburb of Cape Coast Metropolis); there are two offices of the NHIA in the Metropolis with the other one located at the University of Cape Coast (UCC). The choice of the NHIS office located at Abeasie was due to the fact that it used to be the only office of the NHIA until March 2014,

when the office located at UCC became operational. The office located at UCC, therefore, did not have the retrospective data required for the study.

The percentage coverage of the Ghanaian population and that of the Cape Coast Metropolis was estimated to aid in the data analysis. From 2005 to 2009 and 2011 to 2014, data were not readily available for both the Cape Coast Metropolis and Ghana. Similarly, NHIS data were not made generally accessible at the national level for 2013 and 2014. The Formulae for exponentially estimating population was thus used to estimate these populations. Based on these estimations, the percentage coverage of NHIS at both the national level and in the Cape Coast Metropolis, were calculated for further analysis. The formulae is given as:

 $P(t) = P_0 e^{rt}$

Where:

P(t) = the current population

 P_0 = Initial population

e = natural log

r = rate of growth

t =time period (years)

Methods of Data Collection

Record review was adopted to collect data on trends of health insurance subscription in the Cape Coast Metropolis. Record reviews take place when the researcher extracts and examines data from the documents of an institution, which include information about the participant(s) of a study. In-depth interviews were used to collect data from respondents in the qualitative aspect of the study (Boyce & Neale, 2006; Pereira, Pedrosa &

Matovelle, n.d.). This was based on the second and third specific objectives of the study.

Data were collected with the help of three field assistants. Data collection related to the qualitative aspect of the study was conducted at places which were convenient for the respondents. These included their homes and work places. Hand-written notes were taken during the interview process to record, responses given by the participants. An audio recorder was used to record the interview digitally. The purpose of the use of both the audio recorder and hand-written notes was to ensure that the interview process was not halted should any of the equipment (pen or audio recorder) break down during the interview process.

Research Instruments

A checklist was used to collect data from the NHIA offices in the Cape Coast Metropolis in order to answer the first research question of the study. Data on the number of subscriptions to the scheme each year for the nine years under review (2005-2014), were collected. The checklist was divided into two sections; A and B. Section A was based on the general annual trends of subscription from 2005 to 2014 and by sex. Section B was however based on the trends of subscription by special and exempt groups.

An in-depth interview guide was used to collect data for the qualitative aspect of the study which is related to research questions two and three. The in-depth interview guide had three sections. Section A was used to collect data on socio-demographic characteristics of respondents, Section B focused on factors motivating subscription to the scheme and Section C was based on

barriers to health insurance subscription. Questions in the in-depth interview guide were open-ended.

Pre-testing

The research instruments were pretested among two NHIS subscribers and two non-subscribers in the Komenda-Edina-Eguafo-Abrem (KEEA) Municipality. The purpose of pre-testing the research instruments was to ensure their appropriateness in addressing the research questions of the study. As such, ambiguous and irrelevant questions which were not useful in answering the research questions of the study were removed and the instruments properly restructured to adequately address the study's research questions.

Data Analysis

Data collected from the NHIA on trends of insurance subscription from 2005 to 2014 were processed and analysed using Statistical Product for Service Solutions (SPSS) version 21 and Excel 2013 version. The data were presented using percentages, presented in the form of tables. Data collected from respondents during the in-depth interview, were however, analysed thematically. With this, themes and codes were developed, which formed the bases of the qualitative analysis. Statements of the respondents were presented as quotes to substantiate responses given to questions posed. A frequency table was however used to present socio-demographic characteristics of the study participants.

Challenges

A major challenge faced by the study was the unwillingness of some people to participate in the study even after the purpose of the study was explained to them. According to some of them, they had participated in similar activities but did not get any benefits from their participation. Moreover, some of the respondents reached midway in responding to the instruments and withdrew. Other residents were however used to replace such people. For some of the participants, they could not complete the interview due to emergencies which they had to attend to. Call backs were therefore used to complete such interviews. With this, appointments were booked for the interview to be conducted. One of such persons even refused to continue after the researcher went to his workplace due to an appointment booked with him for the data.

Ethical Considerations

Approval was obtained from the national health insurance authority before the study was conducted in their facility and with their data. Informed consent was obtained from respondents before interviews. This was done by giving them informed consent forms to sign, indicating their willingness to participate in the study. The purpose of the study was explained to them before interviewing them. They were made aware that they had the right to discontinue the interview process should they feel so, and not to react to questions or statements that sought to infringe upon their rights including privacy.

Steps were therefore taken to ensure that data collected from both respondents and the NHIA were kept confidential (Jones & Bamford, 2004). It was also explained to the respondents and officials of the national health insurance authority that the information they made available to the researcher were not going to be identified with them or about persons whom information were provided.

To ensure that data obtained during the data collection process is protected from unauthorised access, and hence, ensure confidentiality and privacy of the data, voice recordings were locked with a computer programme called 'my lockbox'. Notes taken and data collected from the NHIA were typed and the soft copies equally locked in 'my lockbox'. The hard copies were however, hidden from sight. Anonymity of respondents was ensured by using pseudonyms where necessary, instead of the real names of respondents and other characteristics that personally identified them. All authors whose works were used in this study were also duly cited to avoid plagiarism.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents findings from both the qualitative and the quantitative aspects of the study. The quantitative data comprises those collected on trends of health insurance subscription in the Cape Coast Metropolis from 2005 to 2014, while the qualitative data comprises data collected from respondents through in-depth interviews. The chapter is organised based on objectives of the study. These were trends of health insurance subscription, factors motivating subscription to health insurance, and barriers to health insurance subscription.

Socio-demographic Characteristics of Respondents

The socio-demographic characteristics of respondents in the qualitative aspect of the study, were examined. Out of the 30 respondents who were interviewed, fifteen (50%) of them were subscribers, while the rest were non-subscribers to the NHIS. The respondents were aged between 18 and 59 years. Seventy percent of the respondents were aged 20 to 29 years while 3.3 percent were aged below 20 years. About 67 percent had never married, with 33 percent being married at the time of the study. Christians formed the majority of residents of Cape Coast Metropolis interviewed, (97%), whereas Muslims constituted about three percent of the respondents (Table 2).

Table 2: Socio-demographic Characteristics of Respondents

Socio-demographic	Frequency	Percentage (%)	
Characteristic			
Subscription status			
Subscriber	15	50.0	
Non-subscriber	15	50.0	
Age			
< 20	1	3.3	
20-29	21	70.0	
30-39	4	13.3	
40-49	2	6.7	
50-59	2	6.7	
Sex			
Male	15	50.0	
Female	15	50.0	
Marital status			
Never married	20	66.7	
Married	10	33.3	
Religion			
Christianity	29	96.7	
Islam	1	3.3	
Ethnicity			
Akan	23	76.7	
Ewe	5	16.7	
Ga/Adangme	1	3.3	
Mole-Dagbani	1	3.3	
Level of education			
Primary	1	3.3	
JHS/Middle school	7	23.3	
SHS/ O' Level/ A'	10	33.3	
Level			
Tertiary	12	40.1	

Source: Field data, 2015

About 77 percent of the respondents were Akans, followed by Ewes, with 16.7 percent. Level of education of respondents ranged from primary to first degree. While SHS/ Vocational/ O' Level/ A' Level and first degree had the highest representation of 33.3 percent respectively, primary level of education had the lowest representation of 3.3 percent (Table 2).

Trends of Health Insurance Subscription

Data on subscription to the NHIS in the Cape Coast Metropolis was collated from 2005, which is similar to data on insurance subscription at the national level (Table 3). This is because, actual subscription to the scheme started in 2005, despite the fact that the scheme became operational in 2003 through the National Health Insurance Law (Act 650 of Parliament) and had a legal framework in 2004, through the National Health Insurance Regulations (L.I. 1809) (Government of Ghana, 2004; 2003).

Subscription to health insurance in the Cape Coast Metropolis generally increased from 41,000 in 2005, to 76,247 in 2014. There were however, variations in the pattern of trends in the various years under review. In 2006 for instance, after recording 41,000 subscribers in 2005, this figure reduced by 36,057 to become 4,943 (–87 % change). In 2007, subscription to the scheme increased among residents of the Cape Coast Metropolis, from 4,943 in 2006 to 74, 897; this time, a difference of 69,954. After 2007, total subscription to the NHIS reduced progressively for two years; 44,327 in 2008 and 20,717 in 2009.

Table 3: Trends of Health Insurance Subscription

Years	National			Cape Coast Metropolis		
	Ghana's Population	NHIS subscription	% coverage	Population of Cape Coast Metropolis	NHIS subscription	% coverage
2005	21,430,193	1,348,160	44	93,247	41,000	6
2006	21,972,700	2,521,372	17.68	95,609	4,943	0.05
2007	22,528,943	6,643,371	36.56	98,029	74,897	76
2008	23,099,265	9,914,256	54.66	100,510	44,327	44
2009	23,684,026	10,638,119	61.96	103,055	20,717	20
2010	24,658,823	8,163,714	34	169,894	51,868	31
2011	25,283,064	8,227,823	33	174,194	58,632	34
2012	25,923,107	8,885,757	35	178,604	70,353	39
2013	26,579,354	9,596,991	36	183,126	83,380	46
2014	27,252,214	10,365,154	38	187,762	76,247	41

Source: NHIA, 2012; 2011; 2010; 2009.

In 2010, subscription to the scheme increased to 51,868, from the 2009 figure. From 2010, subscription to the scheme increased consistently until it peaked in 2013, where it recorded its highest subscription over the nine-year period under review. Thus, the NHIS recorded subscription figures of 58,632, 70,353, and 83,380 respectively for 2011, 2012 and 2013. The last year of NHIS subscription under review (2014) however, saw a reduction of 7,133 from the 2013 figure by recording 76,247 subscribers (Table 3).

Compared to findings from the Cape Coast Metropolis, where subscription declined in 2006, nationwide subscription to health insurance increased from 1,348,160 in 2005, to 2,521,372; 87 percent increase. The findings where subscription in the Cape Coast Metropolis increased from 2006 to 2007, are consistent with those of the national trend, where subscription increased from 2,521,372 in 2006, to 6,643,371; a difference of 4,121,999. Again, compared to findings from the Cape Coast Metropolis, where subscription reduced in 2008 and 2009, NHIS subscription at the national level increased from 9,914,256 in 2008 to 10,638,119 in 2009; a difference of 723,863. Consistent with trends of subscription in the Cape Coast Metropolis, health insurance subscription at the national level increased progressively from 2010 to 2012 by recording 8,163,714, 8,227,823, and 8,885,757 subscribers respectively (Table 3).

From Table 3, in 2005, while subscription to the NHIS constituted 44 percent of the Ghanaian population, 6 percent of the population of the Cape Coast Metropolis was subscribed to the scheme. These further decreased to 18 percent and 0.05 percent, for Ghana and Cape Coast Metropolis respectively, but experienced increases again the following year, moving to 76 percent and

37 percent respectively. By the year 2014, while 38 percent of the Ghanaian population was subscribed to the scheme, 41 percent of the population of the Cape Coast Metropolis did same.

Residents who subscribed to the scheme in 2005 according to Rogers (2003), are innovators, as they happened to be the first in subscribing to the scheme. Innovators according to Rogers, are people who are usually first in adopting an innovation. As an innovation, the reduction in subscription to health insurance in 2006, may mean that most of the people who subscribed to the scheme in the previous year, got disoriented or dissatisfied with services rendered to them as NHIS subscribers, or that the processes involved in subscribing to the scheme and utilising health care services with their membership, was too cumbersome for them due to long queues and prolonged waiting time, both at the points of subscription and utilisation of health care services. This assertion is confirmed by Mulupi et al. (2013) who indicated that the NHIS is associated with delays in accessing healthcare due to long queues and that subscription to health insurance may result in confrontations with health care providers. As such, the people decided not to subscribe to the scheme the following year.

The increase in subscription, witnessed from 2006 to 2007, in the Metropolis may mean that factors such as long queues, which served as barriers to subscription got better, and that the innovators which kept using the scheme over the previous year, encouraged others to join the scheme. According to Rogers (2003), strategies which appeal to the early majority include success stories and evidence of the effectiveness of the innovation. Such new subscribers, according to Rogers, could be described as early

adopters, since they were the second group after innovators, to adopt the innovation.

The progressive reduction in health insurance subscription in 2008 and 2009 in the Metropolis, may mean that as an innovation, the issues which were prevalent and which made membership of the scheme to reduce in 2006, resurfaced. Thus, the NHIS became unattractive to residents of the Metropolis such that even majority of those who were subscribers the previous year, could not renew their subscription. These, could be due to the fact that people got unduly delayed – as a result of long queues – when they went to renew their insurance membership or that they did not receive the quality of services they expected from the scheme when they went to utilise health care services at the health facility.

The reduction in subscription base of the NHIS as an innovation, from 2008 to 2009, may also be due to the fact that people could not afford the cost of subscribing to the scheme. This is consistent with argument by Boateng and Awunyor-Vitor (2013) that some people usually consider the cost/premium for subscribing the NHIS as too costly/expensive and this serves as a barrier to their subscription to the scheme. The issue of yearly premium for subscribing to the NHIS was one of the reasons in 2008, prior to the general elections in Ghana, a one-time premium payment on the scheme became a major issue of debate among the various contesting political parties, with the National Democratic Congress (NDC) proposing its adoption. With a one-time NHIS premium system, subscribers will be required to pay premium only once in their entire life time (Allotey, 2012). The major argument against this policy by opposing political parties, including the New Patriotic Party (NPP), was

however, the fact that a one-time premium would mean subscribers paying huge sums of money, which in itself, defeats the purpose of introducing such a policy in the first place; to reduce the cost of paying for the scheme by subscribers.

The trends of health insurance subscription in 2008 and 2009 respectively, may be related to the conceptual framework of this study. Rogers (2003) argued that at the confirmation stage of the diffusion of innovation theory, the decision to adopt an innovation has already been made. At this stage however, the individual searches for support for his or her decision. Rogers (2003) noted that the individual's adoption decision can be reversed if he or she is "exposed to conflicting messages about the innovation" (p. 189). Attitudes, thus, become much more crucial at this stage. Based on the support the individual receives for adoption of the new idea (innovation) and his/her attitude, later adoption or discontinuance happens during this stage. Disenchantment discontinuance – where the adopter rejects the innovation because he or she is not satisfied with its performance or that the innovation does not meet his/her the needs – could be described as what happened. The NHIA (2012) argued that in 2010, a new methodology for calculating the subscriber base was introduced, which led to reductions in the number of subscribers on the scheme, from 62 percent in 2009 to 34 percent in 2010 (NHIA, 2012). The decline in subscription however, did not have any influence on the figures for the Cape Coast Metropolis, which rather experienced an upward trend of 31 percent compared to the 20 percent subscription recorded in 2009.

In September 2010, the NHIA conducted a special registration exercise with the aim of increasing the NHIS subscriber base. This initiative targeted mainly the vulnerable and poor in all communities and at large congregation centres including markets, mosques and churches. The special registration exercise was carried out all over the country, enabling people who were already subscribed to the NHIS to renew their subscription and new members to register. This therefore might have accounted for the progressive increase in the active subscriber base of the NHIS from 2010 to 2013 in the Cape Coast Metropolis.

According to Wright (2004) and Rogers (2003), there are five major factors which influence adoption of an innovation. They are relative advantage, compatibility, complexity, triability and observability. Relative advantage refers to the extent to which an innovation is seen by people as better than the idea, programme, or product which it replaces. Compatibility deals with how consistent the innovation is with the experiences, values and needs of intended adopters. These factors therefore, might have worked in favour of the NHIS in 2010, 2011, 2012 and 2013 respectively, to ensure that people kept renewing their subscription while new ones joined the scheme. Adopter categories comprising early majority and late majority could therefore be found among subscribers who joined the scheme in any of these years.

The increase in subscription to the scheme consistently, until it peaked in 2013, where it recorded its highest subscription over the nine-year period under review, might be related to the special registration exercise conducted by the NHIA in September 2010. The registration retargeted mainly the vulnerable and poor in all communities and at large congregations, all over the

country. This enabled people who were already subscribed to the NHIS to renew their subscription and new members to register. Thus, the special registration accounted for the progressive increase in the active subscriber base of the NHIS from 2010 to 2013 in the Cape Coast Metropolis.

The decline in subscription in 2014, might be due to the fact that some people who were previously subscribed to the scheme probably did not renew their membership, due to the resurfacing of barriers such as long queues, negative attitude of health care providers and dissatisfaction with services rendered to them under the scheme (Mulupi et al., 2013; Jehu-Appiah et al., 2012; Nguyen et al., 2011).

Trends of health insurance subscription in the Cape Coast Metropolis were analysed by sex (Table 4). According to the Ghana Statistical Service (2012), out of the country's population of 24,658,823, in 2010, 12,633,978 were females while 12,024,845 were males. The implication is that females constituted 51.2 percent of the Ghanaian population while males constituted 48.8 percent. The resultant sex ratio was 95 males to 100 females (Ghana Statistical Service, 2012). Based on this premise, the present study was interested in ascertaining, if the same applies to NHIS subscription in the Cape Coast Metropolis. In the Metropolis, out of a total population of 169,894, 82,810 were males and 87,084 were females, implying that males constituted 48.7 percent, while females constituted 51.3 percent (Ghana Statistical Service [GSS], 2013).

Female subscribers were generally more than males in all the years reviewed. In 2007, for instance, while males constituted 42.2 percent, females

constituted 52.8 percent; a difference of 15.6 percent. Females were again more than males in 2008, with males recording 46.5 percent and females recording 53.5 percent. Aside the trends confirming the existence of more females than males in Ghana and in the Cape Coast Metropolis, the data could also mean that females utilise health care services more than males and as such, decided to subscribe to the scheme to ease economic burden on them in trying to access health care. This is confirmed by Australian Bureau of Statistics (2011), which indicated that females are more likely than males, to use health care services (Table 4).

Trends of Health Insurance Subscription were examined by Special Groups. Special groups according to NHIS classification, comprise, SSNIT pensioners, SSNIT contributors, persons under eighteen years of age, pregnant women, the aged who are 70 years and above, indigents, as well as those engaged at the informal sector. Percentage subscription generally increased for persons under 18 years and the informal sector from 2005 to 2014, with 31.8 to 45.3 percent and 1.6 to 36.3 percent respectively. It however, declined for other special groups over the same period; SSNIT pensioners (from 3.7% to 0.5%), SSNIT contributors (from 20.5% to 7.6%), the aged (from 7.3% to 5.1%), indigents, (from 4.7% to 0.8%) and pregnant women (from 5.2% in 2008 to 4.4%). There were however variations in the yearly trends of the various special groups. About 4 percent of subscribers in 2005, were SSNIT pensioners, which remained virtually the same in the following year (Table 4). In 2007, the percentage of SSNIT pensioners increased marginally to 4 percent before reducing to 0.9 and 0.1, in 2008 and 2009 respectively. Percentage

subscription of SSNIT pensioners again remained stable for 2010 and 2011 before declining again in 2012 (0.5) and 2013 (0.4).

Table 4: Trends of Health Insurance Subscription by Sex

Year	Male (%)	Female (%)	Total (%)
2007	42.2	57.8	100
2008	46.5	53.5	100
2009	37.2	62.8	100
2010	42.9	57.1	100
2011	44.9	55.1	100
2012	37.0	63.0	100
2013	46.9	53.1	100
2014	48.7	51.3	100

Source: National Health Insurance Authority, Cape Coast Metropolis, 2015

Note: NHIS data in 2005 and 2006, were not categorized by sex.

The trends of NHIS subscription for SSNIT contributors were similar to those of SSNIT pensioners. Subscription in 2005 for SSNIT contributors was 20.5 percent. This decreased to 18.9 percent in 2006 before rising again to 21.5 percent in 2007. This however reduced to 14.4 percent of subscribers in 2008 and 6.2 percent in 2009. It saw an upward change again, increasing from 10.1 percent in 2010 to 14.6 percent in 2012. For the remaining two years under review, subscription to the NHIS among SSNIT contributors reduced to 10.9 percent and 7.6 percent in 2013 and 2014 respectively (Table 5).

The share of persons under 18 years as subscribers to the NHIS in 2005, was about 32 percent the total NHIS subscription in the Metropolis (Table 5). In 2006, the group constituted 35 percent of total NHIS subscription. Similarly, persons under 18 years constituted 32.2 percent, 35.6 percent, 26.5 percent, 36.1 percent, 42 percent, 41.1 percent, 40.5 percent, and 45.3 percent in 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 respectively.

Table 5: Trends of Health Insurance Subscription by Special Groups

Special Group	Years (%)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
SSNIT Pensioners	3.7	3.9	4.0	0.9	0.1	1.1	1.0	0.5	0.4	0.5
SSNIT contributors	20.5	18.9	21.5	14.4	6.2	10.1	14.6	16.8	10.9	7.6
Persons under 18 years	31.8	35.0	32.2	35.6	26.5	36.1	42.0	41.1	40.5	45.3
Pregnant women	-	-	-	5.2	19.6	8.7	7.0	6.0	4.8	4.4
Aged 70 years and above	7.3	5.9	5.7	3.5	6.4	5.2	7.5	5.0	4.7	5.1
Indigents	4.7	3.4	3.0	2.4	0.005	0.008	0.007	2.8	10.6	0.8
Informal sector	1.6	3.7	20.3	28.1	41.2	38.8	27.9	27.8	28.1	36.3
Non-special groups	30.4	29.2	13.3	13.9	-	-		-	-	-
Total subscription	100	100	100	100	100	100	100	100	100	100

Source: Field data, 2015

Note: There were no data for pregnant women from 2005 to 2007

"Free maternal health care programme was introduced in July 2008 to help Ghana meet Millennium Development Goals (MDG) 4 and 5" (NHIA, 2010, p. 19). The study was therefore, interested in ascertaining the share of subscription among pregnant women on the NHIS since the inception of the programme in 2008. In 2008, when the free maternal health programme was introduced, it recorded 5.2 percent of subscribers to the NHIS. This figure increased to 19.6 percent the following year. The subscription of pregnant women on the scheme as a result of the free maternal health care programme remained relatively stable for the rest of the years, even though there was a reduction from the 2009 percentage figures. In 2010 for instance, 8.7 percent of subscription was by pregnant women, which reduced to 7.0 in 2011 and 6.0 in 2012. In 2013 and 2014, the share of pregnant women's subscription to the NHIS further reduced but marginally, and progressively (Table 5).

The aged, who are 70 years and above, are considered as a special group under the NHIS. In 2005, the percentage subscription of the aged, out of total health insurance subscription in the Cape Coast Metropolis was 7.3. This declined to 5.9 percent in 2006 and further to 5.7 percent in 2007. It further declined to 3.5 percent in 2008 before rising to 6.4 percent in 2009. 2010 saw a decline by recording 5.2 percent, but increased to 7.5 percent in 2011. The percentage coverage of the aged subscribers to the NHIS remained fairly stable for the period from 2012 to 2014, recording 5.0 percent, 4.7 percent, and 5.1 percent respectively.

Indigents are also considered a special group under the NHIS. Percentage coverage among the indigent declined from 2005 to 2008 with 4.7 percent, 3.4 percent, 3.0 percent and 2.4 percent respectively. This declined

further, as only 0.02 percent of NHIS subscription was recorded by indigents from 2009 to 2011. Subscription among indigents, however, increased again with the group recording 2.8 percent in 2012 and 10.6 percent in 2013. It again declined to 0.8 percent in 2014.

The informal sector had 1.6 percent of total subscription to the NHIS in 2005. This was the lowest among the special groups for that year. In 2006, this increased to 3.7. In 2014, informal sector workers constituted 36.3 percent of total NHIS subscription in that year. This is a difference of 34.7 percent over what was recorded in 2005.

An exempt group is a group that is excluded from paying the yearly premium or any other contribution before enjoying benefits from the scheme. SSNIT pensioners, persons who are seventy years and above, children under the age of eighteen years and pregnant women, constitute exemptions on the NHIS (Universal Access to Health Care Campaign Coalition, 2013). Trends of health insurance subscription were analysed for exempt groups on the NHIS.

The share of exempt groups in the transcription to health insurance, generally increased from 47.5 percent in 2005 to 56.1 percent in 2014. Some of the years under review however deviated from this general trend of increase. While some of the years such as 2013, experienced very high subscription rates, others such as 2006, recorded extremely low figures (Table 3). The fact that exempt groups covered 56.1 percent of subscription to the scheme, means that only 44 percent of subscribers either paid yearly premiums, or got deductions made (SSNIT contributors) from their remuneration before enjoying the benefits from the scheme.

The decline in 2008 and 2009 figures for SSNIT pensioners, could also be attributed to the fact that NHIS subscription in the Metropolis reduced consistently for these two years, probably due to barriers confronting subscription to the scheme; long queues and unsatisfactory NHIS services scheme (Mulupi et al., 2013; Jehu-Appiah et al., 2012; Nguyen et al., 2011). The reduction in subscription for SSNIT contributors in 2013 and 2014 respectively, means that as an innovation, the NHIS is gradually becoming not attractive to SSNIT contributors such that despite the fact that 2.5 percent deductions are made from their remunerations (Boakye-Frimpong, 2013) as their contribution and making them automatic subscribers, these group of people prefer not to actually subscribe to the scheme or renew their subscriptions.

The relatively high percentage of NHIS subscription for persons under 18 years could mean that parents and guardians have, over the years, seen the importance of putting their children on the scheme. It helps them to reduce their general spending on health care (Sarpong et al., 2010), since subscription to the scheme is free for such persons (Universal Access to Health Care Campaign Coalition, 2013). The consistent reduction in the subscription figures for women in 2013 and 2014 may mean that pregnant women who used health insurance to access healthcare were dissatisfied with the services and therefore advised friends and relatives who also got pregnant subsequently, not to subscribe to the scheme (cues to action) (Cottrell et al. 2006).

The findings reveal that after 2009, the percentage subscription of pregnant women to the scheme reduced consistently, from 2010 to 2014. This

may be due to the fact that the women encountered challenges – such as long queues and waiting times – in subscribing to the scheme and could therefore not subscribe (Nguyen et al., 2011). In 2008 – the year of introduction of the free maternal health care programme – the maternal mortality ratio of Ghana, according to the 2008 Ghana Millenium Development Goals Report, was 451 maternal deaths per 100,000 live births (National Development Planning Commission, 2010).

Meeting MDG 5 targets required the country to achieve a 75 percent reduction of the levels of maternal mortality in 1990. According to the Maternal Mortality Estimation Inter-Agency Group (MMEIG) of the United Nations, however, the Maternal Mortality Rate (MMR) of Ghana has reduced by 49 percent from 1990 to 2013. In actual numbers, Ghana's MMR according to MMEIG, has declined from 760 deaths per 100,000 live births in 1990 to 380 deaths per 100,000 live births in 2013 (World Health Organization [WHO], United Nations International Children's' Fund [UNICEF], United Nations Population Fund [UNFPA], World Bank & United Nations Development Programme [UNDP], 2014). As the September 2015 deadline for meeting the MDG is almost up, it is obvious that Ghana will be unable to meet the MDG target of 185 maternal deaths per 100,000 by 2015.

The levels of subscription of the aged in the Cape Coast Metropolis was found to be relatively stable over the nine-year period under review. This relative stability may mean that the NHIS really appeals to this age cohort, as it enables them to adequately take care of their debilitating health (Shadbolt, 2011), without having to spend much, as the insurance covers them free of any charges. The trends in health insurance subscription among the indigents may

mean that after being informed that subscription was free for them in 2005, which influenced them to subscribe, many of the indigents got dissatisfied with NHIS related services and therefore decided not to renew their membership, leading to the continuous decline from 2006 to 2009.

This may be coupled with the fact that after 2005, strategies including public education (NHIA, 2015) which are meant to make the people aware that they could subscribe to the NHIS free of any charges, either reduced or were non-existent. According to the NHIA (2005), "the inadequate coverage could be attributed to the difficulty in identifying them (indigents)" (p. 32). In September 2010 however, the NHIA conducted a special registration exercise with the aim of increasing the NHIS subscriber base. This initiative was targeted mainly towards the vulnerable and poor – indigents – in all communities and at large congregation centres including markets, mosques and churches (NHIA, 2010). This could have been responsible for the appreciation of numbers from one to four in 2010. As every innovation takes time to diffuse into a social system (Rogers, 2003), more indigents got to know of their eligibility and subsequently subscribed to the scheme in the years that followed.

The informal sector recorded the lowest subscription rate among the other special groups in 2005. This could mean that public education (NHIA, 2015) could not get to them in order for many workers involved in the sector to get enrolled onto the scheme. After the informal sector innovators subscribed to the scheme in 2005, the early adoptors also followed suit (Rogers, 2003), making the value, increase to 3.7 in 2006.

The increase of informal sector workers in percentage subscription in 2006, over what the group recorded in 2005, implies that the proportion of informal sector workers subscribed to the NHIS has increased significantly, over the nine-year period under review. This may mean that even though they had to renew their membership and pay premium every year, the premium was not expensive, hence, motivating them to subscribe (Schultz et al., 2013; Basaza et al., 2008).

The study found that majority of NHIS subscribers (56.1%) are exempted from paying any monies at all; premium or monthly deductions from salaries. Thus, most NHIS subscribers enjoy health care free of charge, as a result of the exemptions policy. It therefore implies that it is the minority of people who subscribe to the scheme, that actually contribute towards its financing, through premiums paid and monthly deductions made from their remunerations. The NHIA (2012) sums this up by noting that "financial sustainability of the scheme remains a big challenge to management given the increasing demand for health insurance (for SSNIT pensioners, indigents, pregnant women and persons under 18 years) and its consequential increase in health care service utilisation" (p. 39).

Factors Motivating Health Insurance Subscription

While subscribers were asked to indicate the factors which motivated them to subscribe to the NHIS, non-subscribers were asked to indicate factors which may motivate them to subscribe to the scheme. The major motivational factors identified were; being able to access health care at a cheap cost as the health insurance premium is affordable, NHIS providing access to free drugs, serving as a safeguard against health challenges, financial protection against unforeseen health challenges and the scheme allowing people the ability to save extra money for other needs. Friends, family members and colleagues, were found to motivate subscription to the NHIS.

Most of the subscribers said they subscribed to NHIS so that it will enable them to easily access health care at a cheap cost, which is the yearly premium they had to pay. A 25-year old male subscriber for instance, said; "I joined the NHIS in order to receive health care at a cheap cost". Another respondent noted;

I was motivated to subscribe because, sometimes you wouldn't get the money to go to the hospital. When this happens, because you are an NHIS member and have paid something little as premium, you would be able to visit the hospital and if anything at all, you will pay just a little token, and they will (health professionals) attend to you.

Some of the non-subscribers also said that a major motivation to subscribe to the NHIS had to do with the ability of subscribers to access health care free of any charges, after paying relatively cheap premiums. One of them said;

- Subscriber, Male, 24 years.

The NHIS makes it possible for you to visit the hospital and get treatment free of charge, after paying the yearly premium, which I see to be very cheap. Once you have your card, that's all. You don't need anything else. Just go there (health facilities) and the doctors would attend to you.

- Non-subscriber, Male, 36 years.

The responses given by the respondents relating to the low health care financial cost, are consistent with arguments by Schultz et al. (2013). According to Schultz et al. (2013), the low cost/premium of health insurance is the number one factor which motivates subscription to health insurance. In relation to the conceptual framework, Greenhalgh et al. (2004), noted that it is the perceived attributes of an innovation that determine its rate of adoption to a great extent. As such, the nature of the NHIS as being cheap in terms of premium paid, motivated the respondents to subscribe to it.

Regarding NHIS serving as a safeguard against health challenges, both subscribers and non-subscribers to the NHIS said that being a subscriber to the scheme serves as a form of safeguard against any immediate health challenges they may face. The following quotes summarize their views;

As a human being, no one is protected from diseases or sicknesses, accidents and so on. Anything at all can happen to you at any time, even right now that we are talking. Without NHIS, they (health care workers) can't attend to you. However, if you have the card, you are always assured of prompt care in such situations.

- Subscriber, Male, 24 years

I think in subscribing to the NHIS, you and your family are able to protect your life, your children and safeguard your health conditions. Aside that, I think it (NHIS) comes with so many benefits. You can go to the hospital and after the doctor examining you and giving his report, you can come for the medicines at the pharmacy and not necessarily at the hospital. Simply put, it helps you to protect your life and those of your family members.

- Non-subscriber, Male, 28 years

The responses given by respondents concerning the fact that they subscribe to the NHIS to safeguard their health against any health problems, is consistent with arguments by Sarpong et al. (2010) that health insurance schemes are considered effective avenues of healthcare financing as they safeguard access to healthcare for both the rich and the poor. In relation to the conceptual framework, the NHIS providing a safeguard against health challenges, is seen by the respondents in its relative advantage offered them. Relative advantage, according to Wright (2004) and Rogers (2003), refers to the extent to which an innovation is seen by people as better than the idea, programme, or product which it replaces. The NHIS, for instance, replaced the cash and carry system (Blanchet et al., 2012). As it has been able to serve as a safeguard against health problems, it therefore became relatively more advantageous than the cash and carry system which it replaced.

Concerning the NHIS providing access to free drugs, respondents, both subscribers and non-subscribers, indicated that subscription to the health insurance, enables the individual to access drugs free of any charges at the

point of service delivery. A 30-year old female subscriber for instance said; "now I have access to free medical care and free drugs as well". Others also had these to say;

Since individuals covered by the scheme have access to free drugs and other services, they are able to seek healthcare anytime. For instance, pregnant women are provided with free drugs and the cost of some lab tests are minimal. This, I think, is a good motivation to be a member [of the scheme].

- Non-subscriber, Male, 27 years

If you go to the hospital and you don't have NHIS, you'll be asked to buy drugs and so on. I therefore subscribed to the NHIS, so that I will always get free health care, should I fall sick anytime, especially, the drugs, which are free once you have your card.

- Subscriber, Male, 24 years.

The NHIS offering free drugs to respondents, and thus, serving as a motivational factor once again, is consistent with arguments of Rogers (2003) in relation to the relative advantage offered by an innovation, which motivates people to subscribe to it. The cash and carry system does not provide free access to drugs, as everything is paid for, by the client. With the NHIS however, people are motivated to subscribe as they are fully aware that drugs will be actually free.

Concerning NHIS serving as a form of financial protection against unforeseen health challenges, all subscribers responded in the affirmative.

Some of the non-subscribers also indicated the fact that NHIS provides a form of financial protection. Some of the respondents had these to say;

That's indeed true, because sickness comes at any time and I would not be informed as to when and where it will come. With the NHIS, I know that any moment that I fall sick, I would not be worried, since I have insurance to help me. It's just like saving money for specific reasons

- Subscriber, Male, 25 years.

Yes. It (NHIS) is good and serves as a source of financial protection for those who are on it. It's more or less, like a safeguard of your life against future problems concerning your health. It protects you from any disease which may afflict you at any time. But for me, I've signed an agreement with my bankers – Barclays Bank – and they do deduct from my pay, some little token, as a form of health insurance, which when you get sick, they have to remit you to cater for your health needs.

- Non-subscriber, Male, 28 years.

The NHIS serving as a form of financial protection, is consistent with argument made by Mulupi et al. (2013) that people see their subscription to the health insurance as a form of financial protection against unforeseen health challenges/problems. This motivational factor in subscription to health insurance as noted by Mulupi et al. (2013), is common to both subscribers and non-subscribers.

Regarding the scheme enabling people to save extra money and thus becoming a motivation for subscription, all subscribers in addition to some of the non-subscribers responded in the affirmative. Some of them had these to say;

Sometimes, when you go to the hospital, they would prescribe some drugs for you, which would cost you over GHC 70. Because you are a subscriber to the health insurance, and you don't pay anything, automatically, that GHC 70 then becomes money which you can use for other things, like paying school fees.

- Subscriber, Male, 51 years.

It (the NHIS) helps certain people in some situations and also helps save money. Because, in the case of my father, he had a problem with his eyes and I went with him to the hospital three times, and in all the three occasions, he was taken care of without having to pay any money. But because he was an NHIS subscriber, they didn't want to attend to him directly or immediately and were always postponing the time that we are to come for check-up. Meanwhile, the thing too was affecting him so, I even got fed up since they always give different stories weeks upon weeks that we went. But later, an NGO from Accra came to his town and they, upon their screening activities, realised that my father's situation was getting worse and that they needed to send him to Accra for treatment. They then asked whether my father was an NHIS holder. After knowing that he was (a subscriber), they took him to Accra for his eye

treatment and he got cured free of charge. It really saved us a lot of money.

- Non-subscriber, Male, 25 years.

Unlike the cash and carry system, where one has to pay for all services provided, NHIS covers minor ailments where one needs not to pay anything. Even with some chronic ailments which require some huge sums of money, insurance covers part of them. For instance, last year, I had to undergo a surgery which costs 700 Ghana cedis, but since I had insurance, I paid only 350 Ghana cedis. This means I saved 350 Ghana Cedis, to take care of other things like school fees.

- Subscriber, Female, 22 years.

According to Arin and Hongoro (2013), an important motivation for people in subscribing to health insurance is that it helps them to save money that would have been used to pay hospital bills when they or their family members fall ill. These moneys could then be used to take care of other expenditure. The findings of the present study are also consistent with arguments made by Chneider and Diop (2001) in a study conducted in Rwanda. Chneider and Diop noted that subscription to health insurance significantly reduces out-of-pocket spending for a full episode of illness for sick subscribers, as it allows them to save extra money which would otherwise, have gone into paying for healthcare.

Family, colleagues, and friends also motivated subscription to the NHIS. The diffusion of innovation theory asserts that friends, family

members, colleagues at work/school among others, form important sources of motivation for people to adopt an innovation (Rogers, 2003). Both subscribers and non-subscribers were therefore asked to indicate if any of these groups of people, ever influenced them to either subscribe to the scheme or renew their membership. Most of the respondents said such people had convinced them to subscribe or renew their subscription to the NHIS. They generally mentioned friends, colleagues at work and school, as well as family members, as the ones who convinced them to subscribe to the scheme or to renew their subscription. They were asked to also indicate the reasons given by those who convinced them, as to why they should subscribe or renew their subscription to the scheme. Some of them had these to say;

Friends and family members, advertisements on TV stations and some other people here (in the community) motivate me (to subscribe). My friends and family members for instance normally say that I should get the card again, so that when I go to the hospital, I'll not have to pay anything. Aside that money, they also said the card can also be used for other purposes like identifying yourself, so I should get it

- Non-subscriber, Female, 35 years).

My family members, especially my mum, has been encouraging me to get the card. She keeps telling me that I should go and renew my card, but to me, it does not benefit me because, I don't fall sick. I did it (subscribed) once and I didn't use it till it expired.

- Non-subscriber, Male, 26 years.

My mother and my grandmother, have always been encouraging me to remain being a member of the NHIS. They have been encouraging me to renew my card when it expires, so that if I fall sick, I will be able to access healthcare without paying anything for it. They also say that if I don't have the card, it will be difficult for them to support me financially when I fall sick.

- Subscriber, Female, 25 years.

According to Rogers (2003), environmental factors refer to factors that can affect an individual's behaviour. These factors are the social and physical elements of the individual's environment. The social environment includes friends, family members and colleagues who may influence the behaviour of the individual. The issue of friends and family members convincing the study participants to subscribe to the scheme, therefore confirms Rogers' arguments.

For some of the non-subscribers, when asked to indicate if they were motivated in anyway, to subscribe to the NHIS, they said that nothing about the NHIS motivates them to subscribe to it. One of them for instance, had this to say;

As for the NHIS, right now, I don't know what will motivate me to go and do it, even though I have the money to register. They collect money when people go to register and renew and every now and then, people are registering and renewing their cards, so why can't they pay the hospitals the money that they owe them so that they can work well but rather deny them of their monies. What then do you

expect? They (hospitals) will then start charging people, whether you have NHIS or not, to make up for their losses. So, if they don't change some of these things, then I don't think I will ever register. When it becomes critical that I am sick and need to go to the hospital, I will go and borrow some money for that.

- Non-subscriber, Male, 27 years.

The views expressed by these non-subscribers, contradict views of subscribers and the other non-subscribers whose statements suggested that the NHIS is comparatively more advantageous than paying for health care out of pocket. Thus, the views expressed by the non-subscribers suggest that the NHIS does not offer any comparative advantage (Wright, 2004; Rogers, 2003) over out-of-pocket payments.

According to Rogers (2003), relative advantage refers to the extent to which an innovation is seen by people as better than the idea, programme, or product which it replaces. In this case, the NHIS as an innovation, came to replace out-of-pocket payments (Cash and carry) (Abubakari, 2012), but it is not relatively more advantageous than paying out-of pocket. As such, the respondents saw no reason to subscribe to it.

Barriers to Health Insurance Subscription

The major barriers to health insurance subscription among the respondents were long queues and waiting time, perceived poor quality of drugs, corruption and negative attitude of services providers both at the healthcare facilities visited and the health insurance office.

Concerning queues and waiting time, most of the subscribers said that queues at both the NHIS offices and the health facilities were just too long, and that this prolongs waiting time at the hospital. The following statements summarize their views;

Sometimes, the queues at the hospitals would discourage you from going to the hospitals. Also, corruption is part, since you will wake up early to go and sit there, only for you to sit there and watch people who come late, go in and register and you will still be sitting there waiting to be attended to

- Subscriber, Male, 32 years.

I spent almost the whole day over there (NHIS office), the last time I went (to subscribe). I went very early and I met a very long queue waiting for me. Sometimes, some people who have friends there, come very late but get attention very fast. That keeps some of us really wasting a lot of time there (at the NHIS office).

- Subscriber, Male, 25 years.

Ah! How can you go and sit in a line (queue) just waiting to see the doctor for over 4 hours? This, sometimes, even makes me not to go to the hospital. I am not satisfied at all. Even if you have something to do at home, then you I'll just be sitting there in the line doing nothing

- Subscriber, Female, 21 years.

Contrary to the views of subscribers on queues and waiting time at the health facilities, which they indicated as long and time wasting, non-subscribers indicated that because they usually went to the facilities without the NHIS cards, they were always promptly attended to. The respondents even revealed that there were usually, two different queues; the longer one being that of NHIS subscribers. One of the non-subscribers had this to say;

It took me about two hours (to see a doctor). As for me, I was not carrying insurance card, so, I was not in the longer queue. There were only some few people in front of me. So, the moment they finished, I also went to see the doctor. I think the two hours I spent before seeing the doctor was not too bad because, those who came with the (NHIS) card, spent more time over there. There was this woman from my house, who was there before I went to the hospital. When I was leaving, she was still in the queue.

- Non-subscriber, Male, 36 years.

Findings of this study in relation to respondents' complaints about long queues and prolonged waiting time, being a major barrier they faced, are corroborated by Mulupi et al. (2013). Mulupi et al. argued that unnecessary delays in accessing healthcare, due to long queues, usually serve as barriers to their utilization of such services, which in the case of this study, is subscription to the health insurance and utilization of health insurance related health care services. Dalinjong and Laar (2013) and Bruce et al. (2008) also noted that waiting time has been reported as a major barrier associated with the health insurance among people. Bruce et al. (2008) stated that health

insurance subscribers mainly see waiting times to be long while nonsubscribers see them as short.

Concerning the perceived quality of drugs, while subscribers generally indicated that they were not satisfied with the quality of drugs they were given, non-subscribers said they were satisfied with the quality drugs they were given when they last went to the hospital. Most of the non-subscribers even indicated that the poor quality of drugs given to NHIS subscribers was a major reason they did not subscribe to the scheme. The following quotes summarize their views:

In fact, the drugs that they will give to you, in my opinion, it's not fair. Because when you're not feeling fine, maybe with malaria or something else, they will just give you para (paracetamol tablets). In fact! para is constant. While I can buy para for just 30 pesewas, you give me para, which doesn't even work for malaria, and ask me to go and buy the other medicines outside. It's very bad.

- Subscriber, Male, 24 years

The quality of the drugs I was given the last time I went to the hospital was not good at all. You see, they (pharmacists) only give you para para para (paracetamol tablets) and that's all. Then they'll ask you to go and buy the rest even though they know papa would not cure your sickness. They only told me that NHIS doesn't cover the rest of the drugs and asked me to go and buy common vitamin C and that NHIS don't cover it.

- Subscriber, Female, 28 years

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Nowadays, if someone has NHIS and he or she goes to access healthcare, the doctors wouldn't attend to him or her very well. Because the person has NHIS, the drugs that they will give him too wouldn't cure his sickness at once. But if you pay out of your pocket without NHIS, you'll be attended to within a short time and every drug that you'll be given too, will work very well for you. Also, sometimes, sickness that will take three days to be treated, will take about six days, all because you are having NHIS and the drugs given you are not of good quality. So to me, all these don't serve as motivation for subscribing to the scheme.

- Non-subscriber, Male, 25 years.

They (health care workers) took care of me very well and gave me some good drugs. Where, I went, it wasn't a government hospital but a private one. They asked me whether I had NHIS and I told them no, but they took care of me and gave me good drugs, and the drugs really worked well for my sickness to go very fast, when I took them. If I were an NHIS subscriber, the drugs that would be given me, would be nothing to write home about.

- Non-subscriber, Male, 25 years.

I went to the hospital with a friend who was sick. The first drugs they gave him didn't cure him. He therefore went the second time to the same hospital which was a government hospital and he was still not

feeling better. So, he went to a private hospital which doesn't accept NHIS and he was made to buy certain drugs and he became fine.

- Non-subscriber, Male, 27 years.

Findings of this study in relation to the perceived quality of drugs, are consistent with arguments made by Dalinjong and Laar (2013). Dalinjong and Laar argued that perceived low quality of drugs received by health insurance subscribers when assessing healthcare is a major barrier associated with the insurance as seen by clients. Dalinjong and Laar argued that people are very often given different drugs when they report illnesses/disease conditions to hospitals with health insurance and with out-of-pocket payments. The drugs given to clients when they use health insurance to access health care are usually of inferior quality compared to those given to the same clients when they access healthcare based on out-of-pocket payments. This erodes their confidence in the scheme and consequently, negatively influences their decisions concerning subscription to the scheme (Dalinjong & Laar, 2013).

Regarding attitude of NHIS service providers, most of the subscribers interviewed indicated that the providers were rude to them. They alleged that the service providers were corrupt and this influenced the way they attended to clients. Some, however, said that attitude of the NHIS staff was positive towards them. The following statements summarize their views:

I think they don't do the right things. Their attitudes are just very bad. They do it [register or renew cards] for people they know even if they don't come early or they are not in the queue at all and then they'll say it's the network and to me it's a cheat.

– Subscriber, females, 30 years

The attitude of those people was very negative. It's very bad because, they are very corrupt. You would sit down and see people going into the room to be registered and you will sit at your usual place without moving. If you say it, then they start insulting you as if as for you 'diee', you're nothing before them, not even a human being.

- Subscriber, Male, 32 years.

I think their attitude was good towards me. There wasn't any attitude by the workers that discouraged me from registering or going to renew my membership. So far as the network is there for them to work, they just do their work exactly the way they are supposed to do it.

- Subscriber, Male, 24 years.

Findings of this study where most of the respondents indicated negative attitude of NHIS staff towards them, are consistent with arguments by Criel and Waelkens (2003) who also found attitude of service providers as negative. According to Criel and Waelkens, when attitude of service providers is negative towards health insurance clients, it negatively influences their views about services provided and the scheme as a whole. Negative attitude of service providers therefore, according to Criel and Waelkens, is seen as a major barrier to subscription to the health insurance and its renewal.

Concerning the attitude of the health care providers, none of the non-subscribers indicated a negative attitude towards him or her when they visited the facilities for health care. Some of them however acknowledged that health care professionals – especially nurses – have negative attitudes towards clients. One of them had this to say;

Oh! The doctor who attended to me was normal (his attitude was satisfactory). As for the nurses, you know they are always trouble. But the last time I went to the hospital, none of them did anything negative towards me. Those who gave my medicines to me also didn't do anything bad to me or insult me. I was only in the line (queue) and when it was my turn, they called me to come for my medicines.

- Non-subscriber, Male, 36 years.

On the contrary, most of the subscribers indicated that the attitude of health care providers especially nurses, was negative towards them. A 23-year old male subscriber for instance, said "Even the small nurses, the way they behave, I don't like them at all. All they know is how to insult people. One even insulted me the last time I went to the hospital". Another one said;

As for that one, I don't even want to talk about it. Some of the nurses think they are better than anybody else they see. Even when you are talking to them, they don't regard you as a client who deserves to be listened to. Rather, they start insulting you.

- Subscriber, Female, 27 years.

Attitude of service providers is a major factor which influences subscription to health insurance as well as renewal of membership (Mladovsky & Mossialos, 2008; Criel & Waelkens, 2003). The results of the present study are in conformity with postulations of Arin and Hongoro (2013). Arin and Hongoro suggested that not only do negative attitudes of health care providers negatively influence the decision of non-subscribers to enrol onto the scheme, but also it negatively influences the decision of those already subscribed to the scheme to renew their subscription. Thus, non-subscribers who see attitude of healthcare providers as negative, may decide not to become members of the scheme while people who are already members of the health insurance scheme decide not to renew their subscription when they consider attitude of healthcare providers as negative towards them.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter summarises the research process and major findings of the study. Conclusions are then drawn based on the major findings made. Based on the major findings made, recommendations are also made for policy and practice. Suggestions are then made for further research on health insurance subscription.

Summary

The study sought to examine health insurance subscription in the Cape Coast Metropolis. The specific objectives of the study were to;

- Examine trends of health insurance subscription in the Cape Coast Metropolis from 2005 to 2014;
- 2. Explore factors motivating subscription to health insurance among residents of Cape Coast Metropolis; and
- Explore barriers to health insurance subscription among residents of the Cape Coast Metropolis.

The study was guided by both the interpretivist and positivist research philosophies. The research adopted a mixed method comprising both qualitative and quantitative research. Descriptive and explanatory designs were adopted as the study designs. The target population of this study were residents of Cape Coast Metropolis, who were eighteen years and above at the time of the study. For the quantitative aspect of the study, all records of

subscription to the scheme in the Metropolis for the nine-year period under review (2005 to 2014) were chosen from among records kept by the health insurance authority in the Cape Coast Metropolis. Thirty (30) respondents were however selected to form the sample size of the qualitative aspect of this study. The thirty respondents comprised fifteen subscribers and fifteen non-subscribers to the scheme.

A checklist was used as the instrument for data collection, to collect data from the main office of the NHIA in the Cape Coast Metropolis in order to answer the first research question of the study. An in-depth interview guide was also used to collect data for the qualitative aspect of the study.

Data collected from the NHIA from 2005 to 2014 were processed and analysed using Statistical Product and Service Solutions (SPSS) version 21 and were presented with tables to show the trends of subscription. Data collected from respondents during interviewing were however processed and analysed thematically. Statements of the respondents were presented as quotes to substantiate responses given to questions posed.

The study found that subscription to health insurance in the Cape Coast Metropolis generally increased from 41,000 in 2005, to 76,247 in 2014. At the national level too, subscription increased from 1,348,160 in 2005 to 8,885,757 in 2012. There were however variations in the patterns of trends in the various years under review, as there were upward and downward trends in subscription. The last year under review, for instance, recorded reduced subscription; from 83,380 in 2013, to 76,247 in 2014.

The study found that female subscribers were generally more than males in all the years reviewed. Special groups comprised SSNIT pensioners,

SSNIT contributors, persons under eighteen years of age, pregnant women, the aged who are 70 years and above, indigents, as well as those engaged at the informal sector. Percentage subscription generally increased for persons under 18 years and the informal sector from 2005 to 2014. It however, declined for SSNIT pensioners, SSNIT contributors, the aged, indigents, and pregnant women.

There were variations in the yearly trends of the various special groups, with some of the years experiencing reduction in general subscription for all the groups. Special groups consisting of SSNIT pensioners, persons who are seventy years and above, children under the age of eighteen years and pregnant women, constituted exemptions from paying the yearly premium or any other contribution before enjoying benefits from the scheme. By the last year under review by the present study (2014), it was realised that the exempt groups constituted majority of NHIS subscribers in the Metropolis with a 56.1 percent representation.

The main motivational factors indicated by the respondents were; being able to access health care at a cheap cost as the health insurance premium is affordable, NHIS providing access to free drugs, serving as a safeguard against health challenges, financial protection against unforeseen health challenges and the scheme allowing people the ability to save extra money for other needs. Friends, family members and colleagues, also served as major factors motivating subscription to the NHIS. The major barriers to health insurance subscription among the respondents were; long queues and waiting time, perceived poor quality of drugs, perceived corruption and

negative attitude of services providers both at the healthcare facilities visited and the health insurance office.

Conclusions

The following conclusions are drawn based on the key findings of the study; NHIS subscription in the Cape Coast Metropolis, has generally increased from 2005 to 2014. There have however been variations in individual years, with some of the years experiencing significant reductions in subscription.

Majority of NHIS subscribers in the Cape Coast Metropolis, are SSNIT pensioners, persons who are seventy years and above, children under the age of eighteen years and pregnant women, who enjoy services of the NHIS without paying any premium or contribution.

Residents of the Cape Coast Metropolis are motivated by various factors, to subscribe to the health insurance. These include the health insurance scheme enabling the people to access health care at a cheap cost as the health insurance premium is affordable, providing access to free drugs, serving as a safeguard against health challenges and financial protection against unforeseen health challenges. Residents are also motivated to subscribe to the scheme, as it enables them to save extra money for other needs. Friends, family members and colleagues also motivate people to subscribe to the scheme in the Metropolis.

Residents of the Cape Coast Metropolis are faced with various barriers to health insurance subscription. These barriers include long queues and waiting time, and perceived poor quality of drugs. Others include, corruption

and negative attitude of services providers, both at the healthcare facilities visited and the health insurance offices.

Recommendations

Based on the key findings of the study, the following recommendations are made for policy and practice.

- 1. More informal sector workers should be encouraged through special registration exercises, organised by the NHIA, to offset the high percentage of exempt groups on the scheme, so as to improve the economic viability of the insurance. The registration exercises could target the people in their homes and workplaces and include explanations as to the positive reasons they should subscribe to the scheme.
- 2. Churches, Mosques, schools, market places and other public places, could be used as points of interest, for the NHIA to advertise the scheme, so as to cover more Ghanaians. Many Ghanaians belong to these groups. Using such fora to advertise the scheme would therefore be an important way of increasing subscription onto the scheme.
- 3. Workshops should be organised by the National Health Insurance Authority and the Ghana Health Service, to entreat their workers, to exhibit positive attitudes towards clients in the exercise of their duties, so as to motivate more people to subscribe to the scheme. This is because, attitude of providers was realised as a major barrier to subscription or renewal of subscription to the National Health Insurance

Suggestions for Further Research

A study may be conducted to investigate quantitatively, the associations between motivators and barriers, as independent variables, and subscription to the scheme, as the dependent variables. This would make it possible to examine the quantitative aspect of barriers and motivators influencing subscription to the NHIS.

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APPENDICES

APPENDIX A

INFORMED CONSENT FORM

UNIVERSITY OF CAPE COAST

DEPARTMENT OF POPULATION AND HEALTH

INFORMED CONSENT FORM FOR RESPONDENTS

A. Introduction

My name is Hubert Amu. I am a Master's student of the Department of Population and Health, University of Cape Coast. I am conducting a research on 'Health Insurance Subscription in the Cape Coast Metropolis'. The research forms part of my academic work. Data collected will be used only for academic purposes.

B. Purpose of the research and Respondent's Consent

The research seeks to examine health insurance subscription in the Cape Coast Metropolis by ascertaining the various factors which may serve either as barriers or motivators influencing an individual's decision to subscribe to the health insurance. I promise that your responses will be confidentially kept. You will also not be identified with information you provide. I will therefore like to seek your consent to take part in this interview.

Respondent's signature/Initials	Date:
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APPENDIX B

CHECKLIST

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CHECKLIST ON TRENDS OF NHIS SUBSCRIPTION

Section A: Health insurance subscription by years and sex

Year	Male	Female	Total
2005			
2006			
2007			
2008			
2009			
2010			
2011			
2012			
2013			
2014			

Section B: Health insurance subscription by special and exempt groups

Special groups	2006	2007	2008	2009	2010	2012	2013	2014
Pensioners								
Formal sector								
Informal								
sector								
Children								
under-five								
Children								
under 18								
Pregnant								
women								
Security								
services								
Indigents								

APPENDIX C

INTERVIEW GUIDE

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INTERVIEW GUIDE FOR NHIS SUBSCRIBERS AND NON-

SUBSCRIBERS

Interview no:	
Date of interview (DD/MM/YY):	/
Time of interview:	StartEnd
Interviewer:	
SECTION 1: Background Characteristics o	of Respondents
1. Age (In completed years)	
2. Sex	
3. Marital status	
4. Religion	
5. Ethnicity	
6. Level of education	
7. Occupation	
8. Which part of Cape Coast Metropolis do y	you stay?
9. (For subscribers only) I. If respondent is	a subscriber, probe for how long
he/she has been subscribed to the scheme	and the first time the respondent
registered with the scheme; day month	and year of first subscription.

Also, probe for the number of times the respondent has renewed his/her

subscription. (You can verify from respondent's card if he or she is carrying it).

- II. What is/are your reason(s) for subscribing to the NHIS?
- III. How much did you pay when you were subscribing to the scheme/renewing your membership? (Probe for specific amount of money paid by respondent).
- 10. (For non-subscribers only) I. If respondent is not a subscriber, ascertain whether he/she has ever subscribed to the scheme, and how long he/she was a subscriber to the scheme (Probe for number of years respondent was a subscriber).
 - II. Why are you not currently subscribed to the NHIS?

SECTION 2: Factors motivating subscription to the NHIS

- 11. (for subscribers only) What is/are your main motivation(s) for subscribing to the NHIS?
 - (For non-subscribers only) What are the main factors which may motivate an individual to subscribe to the NHIS?
- 12. How would you describe the yearly premium paid by NHIS subscribers? (Probe for the premium being either affordable or expensive).
- 13. What is your position on the assertion that the premium paid, enables an individual to save extra money which otherwise would have been spent on health care and thus serving as a motivation to subscribe to the scheme?
- 14. How does the NHIS provide access to healthcare, which serves as a motivation for subscription? (Probe for provision of easy access to health care, devoid of any charges at point of service delivery).

- 15. What is your position on the fact that the NHIS provides a form of financial protection against unforeseen health challenges?
- 16. Comparing the NHIS and paying for healthcare out-of-pocket, which one do you think is comparatively more advantageous? (Probe for respondent's reasons).
- 17. What else do you see as motivating about the NHIS which may influence your decision to subscribe to the scheme/ renew your membership? (Probe for specific aspects of the scheme which appeal to the respondent).
- 18. Has anybody ever convinced/encouraged you to subscribe/renew your member to the NHIS? (Probe for category of persons who influenced respondent [friends, relatives, colleagues at work/school etc.] and the reasons those people gave for asking them to subscribe).

SECTION 3: Barriers to health insurance subscription

- 19. (For subscribers) What are the main barriers associated with subscribing to the NHIS?
 - (For non-subscribers) What are the main factors which serve as barriers to your subscription to the NHIS?
- 20. Where is the NHIS office located?
- 21. How convenient do you consider the location of the offices of the NHIS?
 (Probe for degrees of convenience ranging from very convenient, convenient, not convenient and not at all convenient).
- 22. How do you consider the quality of drugs you were given the last time you accessed health care from a health facility? (Probe for level of quality ranging from very high quality, high quality, poor quality, very poor quality)

- 23. For how many minutes/hours did you have to wait in a queue in order to see a doctor the last time you accessed health care from a health facility?
- 24. How satisfied were you, with the amount of time you stayed in a queue before seeing a doctor the last time you accessed health care? (Probe for the respondent's level of satisfaction ranging from highly satisfied, satisfied, not satisfied to not at all satisfied).
- 25. (For subscribers only). How discouraging was attitude of NHIS staff towards you the last time you went to the facility to register/renew you membership?
- 26. How discouraging was attitude of health care providers towards you the last time you accessed healthcare? (Probe for particular providers whose attitudes discourage respondent and specific attitudes of providers which discourage respondents).
- 27. Has anybody ever discouraged you from subscribing to the NHIS/ renewing your membership to the NHIS? (Probe for category of persons who influenced respondent [friends, relatives, colleagues at work/school etc.] and the reasons those people gave for asking them not to subscribe/renew).

Thank you