ROSEMOND ASTIO

A SYSTEMATIC REVIEW OF THE USE OF NATIONAL HEALTH INSURANCE IN GHANA.

SUPERVISORS: PROFESSOR. HAAKON LEIN AND MR. MICHAEL OGBE

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NTNU

Norwegian University of Science and Technology

DECLARATION

I hereby declare that this thesis is my own research and written by me towards MSc. Globalization and Sustainable Development in the department of Geography. It contains no material previously authored by another with the exception of references which is duly acknowledged in the thesis.

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Rosemond Astio

November, 2021

DEDICATION

I dedicate this thesis to God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout this program and on His wings only have I soared. I also dedicate this work to my parents Mr. Francis Astio and Madam Mary Kpogo for their unmeasurable supports, I say God bless you.

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ABSTRACT

Ghana's National Health Insurance Scheme (NHIS) is an approach to address the problem of financial barriers to health care access. However, the high drop-out rates of Ghanaians in using the insurance scheme informed the objective and research questions of the study to identify the factors promoting and hindering the use of health insurance in Ghana, and suggest measures to improve the insurance scheme. Due to the covid-19 pandemic, a systematic review was conducted for the research as it was a safe method of reducing the risk of getting into contact with the virus whilst finding evidence, and a convenient way of collecting data as restrictions at health centers and lockdowns will create difficulty in data collection. A systematic review for this research is appropriate because it compiles current knowledge obtained from high quality studies to make the evidence more accessible to decision makers in Ghana and to add on to evidence-based practice in the use of NHIS. The systematic review used a Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) which consists of phases such as identification, screening, eligibility and inclusion to obtain a total number of 6 peer reviewed articles which served as the included studies for the review. The methods include inclusion and exclusion criteria, search strategy, quality assessment or appraisal, data extraction, data synthesis and analysis.

A thematic and narrative form of synthesis was used to present the results. This thesis finds, factors that promote the use of health insurance in Ghana were embedded in both the subscription or enrolment of NHIS and the renewal of health insurance in Ghana. Factors hindering NHIS usage were also embedded in non-subscription and non-renewal of NHIS. Five measures suggested by the included studies to improve the NHIS are financial support, innovation, public education, assessments, and partnerships. It was concluded that, factors that hindered the use of the health insurance outnumbers factors that promotes the use of health insurance which is a threat to the sustainability of the National Health Insurance Scheme in Ghana. This thesis recommends, innovative strategies such as introducing a whistleblowing policy, an employment record to target the poor, NHIS partnership with traditional leaders and public education awareness should be adopted within the insurance scheme.

TABLE OF CONTENTS

Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

CBHI	Community-Based Health Insurance
CHPS	Community-based Health Planning and Services
IPS	In-Patient Services
MOH	Ministry of Health
NHIS	National Health Insurance Scheme
NHIA	National Health Insurance Authority
NHIF	National Health Insurance Fund
NHIL	National Health Insurance Levy
OPD	Out-Patient Department
OOP	Out-of-Pocket
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analysis
SDG	Sustainable Development Goals
SDSN	Sustainable Development Solutions Network
SHIS	Social Health Insurance Schemes
SSNIT	Social Security and National Insurance Trust
UHC	Universal Health Coverage
VAT	Value Added Tax
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background

Good health is one of the essential indicators of a country's human development and economic growth which requires the effective performance of health systems (WHO, 2004). The World Health Organization declared good health to be a fundamental right of every individual in 1948 and was repeated in 1978 in the Health for all Agenda (WHO, 2012). A strategic universal health coverage then became an important idea to provide access to health care to a large percentage of a country's population without financial barriers (Hogan et al., 2018). Efforts to achieve quality health care through a universal health coverage by many low-and middle-income countries were made by their governments by exploring different health sponsoring mechanisms known as health insurance. This health insurance method includes Social Health Insurance Schemes (SHIS) (Nsiah-Boateng et al., 2020), and National Health Insurance Schemes (NHIS) (Alhassan & Arhinful, 2016). Largely, health insurance seeks to ensure access and equity in health services (Nsiah-Boateng, 2014) by financially protecting individuals in a community or group against the cost of medication (Atim et al., 1998).

In Sub-Saharan Africa, many countries have embarked on health insurance (Largomarsino et al., 2012) and Ghana was the first country to introduce the National Health Insurance Scheme (Fiestas Navarrete et al., 2019). The National Health Insurance in Ghana is established by the government as a prepayment health scheme providing the health needs of the citizens (Arpoh-Baah, 2011). The National Health Insurance Authority (NHIA) which was created to manage the NHIS has gone

into contracts with other health care organizations such as faith-based and some private health companies (Kotoh et al., 2018) with the aim of supervising and regulating the scheme (Gajate-Garrido & Owusua, 2013; Arpoh-Baah, 2011). The use of the National Health Insurance involves subscribing or enrolling into the scheme and renewing the health insurance to access health care. Enrolment takes the process of health insurance officials taking intended subscribers information such as full name, date of birth, age, marital status, mobile phone numbers, financial status, community of residence and Ghana national identity card number if available. Afterwards, the registration officer collects payments or registration premium, takes a passport size photograph and biometric information of the intended subscriber (NHIA, 2020). Renewal of the health insurance also involves the process of NHIS officials taking the NHIS identification cards, renewal premium or payment from NHIS subscribers or enrollees and taking personal information such as full name, date of birth, NHIS unique member number, contact number, residential address and biometric information. The NHIS officials then activate the NHIS identification cards and attach a sticker on the identification cards of subscribers indicating renewal of NHIS (Alolo et al., 2014; NHIA, 2020).

Ghanaians from low-income households were known to reschedule medical treatment, practice self-prescription, and depend on traditional treatment from unmonitored healers, spiritualists and migratory drug sellers due to the cash and carry system in seeking for health care (Oppong, 2018). An immense improvement in the access to health care of Ghanaians was achieved after the introduction of the health insurance scheme. For instance, the attendance of patients who are not hospitalized and visit the hospital or clinic for diagnosis or treatment (outpatients) increased from 6 million in 2005 to 27 million in 2013 (National Health Insurance Authority (NHIA), 2013). However, despite the benefits that comes with the health insurance scheme, some people have

decided not to use the health insurance. The decision of Ghanaians to use or not to use the health insurance is because of some factors that act as barriers and motivations for health insurance subscription or enrolment (Kumi-Kyereme, 2017) and renewal (Atinga et al., 2015). There is a need to identify these factors and find solutions to ensure a continuous delivery of universal health coverage.

1.2 Problem Statement

In Ghana, a few health financing policies the health delivery system had formulated and implemented failed as it consequently affected citizens especially the poor (Darkpani, 2011). This has brought the attention of researchers to ensure the sustainability of Ghana's NHIS by finding ways to overcome the challenges of insurance services to gain the trust of NHIS subscribers (Alhassan & Arhinful, 2016). An example of such research was the comprehensive assessment of the NHIS policy conducted in 2008 to find out the views of Ghanaians on how the health insurance can be equitable and be improved (NDPC, 2008; Gajate-Garrido & Owusua, 2013). After the implementation of the insurance scheme, it was observed that, there has been a rise and fall in the number of people using the insurance. For instance, pertaining to health insurance subscription or enrollment, 67% of the Ghanaian population had enrolled in NHIS in 2009 (Asenso-Boadi, 2009). This percentage decreased to 34% in 2011 (NHIA, 2011), increased to 40% in the same year and became stagnant with the same percentage between 2011 to 2015 (Agyepong et al., 2016). Renewal of the health insurance also showed a decrease in number as subscribers were not retained. For example, out of 13,480,713 subscribers in 2009 which makes 67% of the Ghanaian population, 4,142, 808 making 17.5% of the population, renewed their insurance cards (Apoya & Marriott, 2011).

The high drop-out rates of Ghanaians in using the insurance scheme became a huge concern by NHIA and brought about other studies investigating what motivates and demotivates the use of health insurance by assessing factors such as financial challenges (Dixon et al., 2011), administrative factors (Barimah & Mensah, 2013), and demographic factors (Nsiah-Boateng et al., 2019). It has been observed that, factors that promote and hinder the use of health insurance in subscription or enrollment is different from factors affecting the renewal of health insurance (Bhat & Jain, 2007). However, the evaluation and summary of the findings of the various individual studies on the use of health insurance in Ghana considering factors and experience affecting enrollment and renewal is rare. Even though some problems have been curbed using some of these studies, decision or policy makers need a more compiled and assessable evidence of factors promoting and hindering the use of health insurance. This evidence will lead to insurance policy reforms in Ghana and thereby increasing the subscription and renewal of the health insurance by citizens.

1.3 Research Objective and Questions

The main objective of the thesis is to identify the factors promoting and hindering the use of health insurance in Ghana.

Research Questions are;

1. What are the factors promoting the use of health insurance in Ghana?
2. What are the factors hindering the use of health insurance in Ghana?
3. What are the suggested measures to improve the use of health insurance in Ghana?

1.4 Significance of the Study

The study of factors responsible for promoting and hindering the use of health insurance is important to achieve the goal of Universal Health Coverage. This is possible because the knowledge of these factors will serve as a guide to the Ministry of Health (MoH) in Ghana which regulates health issues in the country (Ankrah et al., 2019), insurance companies and policy makers. The guide could help make reforms in addressing the changing health needs of people to increase the percentage of Ghanaian population in accessing health care without financial barriers. Also, the Sustainable Development Goals (SDG) 3 which aims at achieving Universal Health Coverage (UHC) in its target 3.8 includes protection from financial loss, quality health care and access to medications can also be achieved through this study. Moreover, equity and economic productivity which is an advantage of NHIS (WHO, 2017) could be promoted. Equity in the sense that vulnerable groups are covered under the NHIS policy to access health care together with non-vulnerable groups. Economic productivity could be ensured because of the ability of the NHIS increasing efficiency in production by reducing the probability of healthy workers in the country from getting sick and missing working days and sick workers recovering early and getting back to work (Dizioli & Pinheiro, 2016).

1.5 Organization of Thesis

The thesis is divided into six sections that is from chapter one to six. Chapter one gives an introduction by providing the background of the study, problem statement, research objective and questions and significance of the study. Chapter two provides an extant literature review on

Universal Health Coverage, National Health Insurance Scheme in Ghana, Prospects of the insurance Scheme, Principles of the Scheme and Determinants of NHIS subscription or non-subscription and determinants of NHIS renewal or non-renewal of health insurance. Chapter three provides the methods of the systematic review by spelling out the reasons for adopting a systematic review in its introduction, inclusion and exclusion criteria for the systematic review, the search strategy, quality assessment, data extraction, data synthesis and analysis and how the results were presented. Chapter four shows a detailed presentation of the results describing the use of a Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) process used to identify, screen and include studies, the characteristics of the included studies, quality assessment of included studies, factors that promote and hinder the use of health insurance in Ghana and suggested measures to the promoting and hindering factors. Chapter five discusses the result with literature based on each research question and chapter six provides the conclusion of the study, strengths and limitations of the systematic review with some recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a review and empirical studies on National Health Insurance Scheme and its usage in Ghana. The literature is reviewed on universal health coverage, Ghana's NHIS, principles of NHIS, Prospects of NHIS, determinants of NHIS enrolment and non-enrolment and determinants of NHIS renewal and non-renewal.

2.1 Universal Health Coverage (UHC)

Universal health coverage is a planned priority in global health which involves the percentage of the population of a country covered in terms of access to healthcare services at an affordable cost or without any financial hindrance (Mills et al., 2012; Hogan et al., 2018; WHO, 2010). This health coverage is not an end in itself but a means to an end with the goal of improving the probability of people having access to quality health care thereby leading to the highest level of health and socio-economic wellbeing without financial barriers (WHO, 2017; Barredo et al., 2014). In the global health agenda, universal health coverage has been discussed such as the post 2015 UN Sustainable Development Goals (SDG) (OECD, 2013), and Sustainable Development Solutions Network (SDSN) (UNESC, 2000). The Sustainable Development Goals (SDG) vision was to "To promote physical and mental health and well-being, and to extend life expectancy for all, we must achieve universal health coverage and access to quality health care" (UN, 2015, p.7). The Sustainable Development Solutions Network (SDSN) also proposed that "by 2030, every country should be

well positioned to ensure universal health coverage for all citizens at every stage of life, with particular emphasis on the provision of comprehensive primary health services delivered through a well-resourced health system" (UNESC, 2000).

Furthermore, apart from universal health coverage providing access to health services to individuals, their socio-economic wellbeing, wealth and economic productivity is also improved (APEC, 2013) and this explains why many countries in Sub-Saharan Africa and Asia perform reforms in their health insurance within their socio-economic conditions (Lagomarsino et al., 2012). Strategies to achieve universal health coverage includes the implementation of low-income policies and ensuring fairness and equity (Chan, 2016), considering who is covered, what is covered and percentage of cost covered (Lagomarsino et al., 2012). Based on experience, guiding principles have been proposed by the Innovative Biopharmaceutical Industry to achieve universal health coverage. These are equitable access, efficiency, quality, inclusiveness, availability, adaptability, choice, and innovation (IBI, 2014).

Ghana is a signatory of the universal health coverage 2030 compact. It was signed in the World Health Assembly resolution in 2011 (Vallekoop & Odame, 2017) but Ghana had already started prioritizing universal health coverage in 2004 through the implementation of the National Health Insurance Scheme. Policies and programmes have been put in place by the Government of Ghana to achieve the goal of UHC (Boateng & Awunyor-Vitor, 2013). Ghana's first step to create an equitable and sustainable journey towards universal health coverage was in 2003 when the National Health Insurance (Act 650) was passed by Ghanaian Parliament (MoH, 2004) and the National Health Insurance Authority (NHIA) was established under the Act (Ankrah et al., 2019).

The Act became operational in 2004 with the objective "to ensure equitable and universal access for all residents of Ghana to an acceptable quality package of essential healthcare" (MoH, 2004, p.1).

2.2 Ghana's National Health Insurance Scheme (NHIS)

National Health Insurance Scheme is a humane approach to financing health care to address the problem of financial barriers to health care access (MOH, 2004). Ghana's public health services was free after independence in 1957 and was financed through tax revenue (Blanchet et al., 2012). The free health care service became unsustainable financially by the 1980's and a health funding policy was introduced in 1983 by the Government of Ghana. This policy was made by the Provisional National Defense Council (PNDC) to ensure patients paid for the whole cost of medication at health facilities (Fuseini, 2012). The paid out-of-pocket (OOP) system was not equitable especially for the poor who were not able to pay for health expenses and consequently led to the decrease of health care utilization (Jehu-Appiah et al., 2011). The Community-Based Health Insurance (CBHI) was established in the 1990's and was led by Non-Governmental Organizations (NGO's) and international bodies. This scheme was helpful but was not equitable because it was operational in few districts in the country and covered only 1% of the population (Blanchet et al., 2012). The cash and carry or out-of-pocket (OOP) system was sustained until 2004 where a policy was implemented to replace the system of payments and to protect the citizens of Ghana from high cost of health care (Xu et al., 2003).

In October 2003, the National Health Insurance Scheme (NHIS) was established under Act of Parliament 650. The National Health Insurance Authority (NHIA) which was also formed under

the Act had the responsibility of managing the financing mechanisms of the scheme that is the National Health Insurance Fund (NHIF). The NHIA also improved the performance of the scheme by introducing free maternal health care in 2008, NHIS call center and biometric identification cards (NHIA 2012; Amu & Dickson, 2016). The NHIS is financed by a 2.5% National Health Insurance Levy (NHIL) on selected goods and services collected under the Value Added Tax (VAT), a 2.5% Social Security and National Insurance Trust (SSNIT) deductions from the formal workers, premiums from the informal workers and non-SSNIT contributors with an amount of GH₵22 (US$ 3.73), returns on National Health Insurance Fund (NHIF) investments, moneys approved for funds by the Parliament of Ghana, fees charged by the Authority in the performance of its functions , moneys accruing under section 198 of the Insurance Act, 2006 (Act 724), grants, and government budget allocations (Dalaba et al., 2014; Hatt et al., 2009; NHIA, 2020). There are groups of people who are exempted from paying premium for the health insurance and account for 69% of the total number of National Health Insurance Scheme subscribers. These are vulnerable groups of children below 18 years, the poor or indigents, the elderly with the age range of 70 and above, pregnant women and mentally challenged people (GoG, 2012; Fiestas Navarrete et al., 2019). In addition, SSNIT contributors, SSNIT pensioners, categories of differently-abled persons determined by the Minister for social welfare and other categories prescribed by the Minister of Health are also exempted from paying renewal premiums. Before an individual register to become a member of NHIS, they are interviewed by registration officers to know which category the individual belongs to. The purpose is to determine whether they should be registered as an exempt group or a member supposed to contribute annually (NHIA, 2020). This initiative of exempting some groups from paying premium was as a result of the goal to remove barriers and ensure

equitable access to health care for all residents of the country (ILO, 2008; Roberts, 2011). The NHIS caters for 95% of diseases for diagnostic, inpatients and outpatients (NHIS, 2018).

Moreover, there are three types of health insurance schemes operational in Ghana under the Act 650. These are District mutual health insurance schemes, Private commercial health insurance schemes and Private mutual health insurance schemes. The district mutual health insurance schemes are a decentralized system where members (from both formal and informal sectors) of the district are able to register and claim ownership of the insurance (MOH, 2004). Private commercial health insurance schemes are operated for profit in private companies. Their operations are regulated by the NHIA but do not receive financial support from the government (Gajate-Garrido & Owusua, 2013). They create monthly premiums to be deducted according to a designated plan. Lastly the Private mutual health insurance schemes also do not receive subsidy from the government but is regulated under the Act (Arpoh-Baah, 2011). This type of scheme can be operated by any group of persons in Ghana and it can be faith-based and community-based (MoH, 2004). Other health facilities in Ghana have been accredited by the NHIA to provide services to NHIS subscribers. These health facilities include Community-based Health Planning and Services (CHPS), maternity homes, health centers, clinics, polyclinics, pharmacies, licensed chemical shops and diagnostic centers (NHIA, 2020).

2.3 Principles of NHIS

The Ministry of Health (MOH) (2004) outlines ten (10) underlying principles the health insurance in Ghana should follow in its processes. These are;

i. Equity: This means despite the socioeconomic conditions of the member, everybody or every citizen has access to the minimum benefit package of health care and has equal opportunity to join a health insurance. Also, health insurance should be always accessible so that enrollees are not denied access to needed health care.

ii. Risk-equalization: This means financial resources will be apportioned to geographical areas of the country depending on the total consequences of harmful diseases and mortality patterns which is mostly related to the poverty levels in those areas.

iii. Cross-subsidization: The ability to pay is the metric this principle uses in the design of the scheme. It ensures that everybody contributes based on your income level and despite the risk of an individual falling sick. In this way, the poor, the sick and children are cross-subsidized by the rich, the healthy and employed adults respectively.

iv. Solidarity: This principle has to do with mutual financial support for vulnerable groups such as poor, elderly and children by helping them get rid of diseases in the country. This is a virtue which involves the expression of empathy in health insurance to remove financial barriers to health care access. It is also a form of mutuality because in the case where there are communicable diseases in the country and a neighbor who is afflicted by this disease is helped to get rid of it, the health status of the one helping the neighbor is also positively impacted by not contracting the communicable disease.

v. Quality Care: Value for money is what this principle seeks to ensure in the provision of health services for insured individuals. The likelihood of health insurance subscribers to utilize health care at an increasing rate depends on the perceived quality of care which is worth the money in purchasing the health insurance.

vi. Efficiency: This principle deals with efficiency in the collection of contributions and administration of claims. The demand or purchase of health insurance involves the collection of contributions which is important in ensuring the sustainability of the scheme. Unfortunately, a high number of people who demand for health insurance are in the informal sector making it difficult for contributions to be collected because informal forms of collecting contributions do not exit. As a result, informal or traditional forms of contributions will be adopted. Efficiency in the administration of claims on the other hand deals with how fast service providers will be reimbursed since these providers depend on internally generated funds to increase government regular budget which often delays.

vii. Community or Subscriber Ownership: This kind of ownership is achieved when the community is involved in the planning of health care and sharing of experiences and preferences of quality health care delivery through their participation.

viii. Partnership: The scheme is to form partnership with the government because the pro-poor nature of the scheme requires the government to grant funds to bridge the gap of financial unsustainability. This gap results from actual contributions not meeting the expected contributions. Partnership with the government is also important to provide a complete payment on behalf of the vulnerable groups in the country.

ix. Reinsurance: This principle deals with preparation for under-funding which may result from uncertain or unforeseen events such as disease outbreaks and natural disasters. In this case, central funds will be needed to stabilize the scheme.

x. Sustainability: The scheme will ensure sustainability by developing the capacities of human resource, systems and policies to manage areas of risk and fraud control.

2.4 Prospects of National Health Insurance Scheme (NHIS) in Ghana

The prospects of NHIS shows the expectation of the scheme to succeed or fail due to some conditions or situations involved in the process of the Scheme. These prospects are grouped as strengths and threats of NHIS.

The strengths of NHIS include factors such as inclusive nature of NHIS, financial protection and the formulation of a governance and administrative framework. The inclusive nature of the insurance policy includes fairness and equitability of the scheme. These vulnerable groups are exempted from premiums and can utilize health care with other non-disadvantaged groups (NHIS, 2013). The poor (someone living on less than $1.9 per day as defined by the United Nations) is an example of such vulnerable groups. The district mutual health insurance is mandated to use the basis of means test to identify and keep records of members registered to poor or indigent (Agyepong et al., 2016). Interventions used to identify the poor includes the use of poverty maps from the Ghana Living Standards Survey and income levels (NHIA, 2013). Also, the health insurance has the strength of financial protection where insured citizens do not pay or pay less at health facilities (Dalinjong & Laar, 2012). The large percentage of diseases covered that is 95% (NHIS, 2009) with the availability of effective pharmaceuticals (Seiter, 2011) is encouraging

enough to promote health care utilization in Ghana which is a strength of the scheme. A governance and administrative framework have been set out by the Government of Ghana, which carefully plans and implement health insurance services (Schieber et al., 2012). Most of these health insurance services such as issuing identification cards are information technology (IT) driven and has positive impact on areas such as controlling fraud, managing drugs and patient records (NHIA, 2013).

The threats of NHIS that will bring expectations of its failure or retardation consist of factors such as financial unsustainability, failure of the legal system, and political instability. The problem of financial unsustainability of the health insurance scheme (Barimah & Mensah, 2013), is as a result of weak financing policies (Amu & Darteh, 2017), the low percentage of subscribers or enrollees (Imurana et al., 2014) and fraudulent activities by both health insurance members and providers such as charging untendered services and non-enrollees using an enrollee's identity to access health care (NHIS, 2013). Also, the abuse of health services by insured people where there are frequent visits to health facilities with minor ailments (Dalinjong & Laar, 2012) is a threat to the sustainability of the health insurance scheme. Lastly, healthcare facility problems such as untrained staff, inadequate health facilities and equipment pose serious challenges to the insurance scheme (Darkpani, 2011). The legal system of the NHIS has also been found to be a challenge. According to Imurana et al., (2014), the District Mutual Health Insurance has been made self-governing and receives funding from the NHIA as it states in section 33 of Act 650 that "A District Mutual Health Insurance Scheme shall be provided with subsidy from the National Health Insurance Fund". The Act failed to integrate an adequate accounting system which has led to secrecy and conflicts (Apoya & Marriott, 2011), inability to track the use of health services by

patients (Schieber et al., 2012), corruption and misappropriation of funds (NHIA, 2009). Another threat to the NHIS is the political instability in Ghana which makes it difficult for the new government to accept and implement the reforms of the outgone government. An example is the change in government after the publication of the 2016 report where measures were taken slowly from the recommendations of the report (Ghanem et al., 2019; MOH, 2019).

2.5 Determinants of NHIS Subscription/ Enrolment and Non-subscription/ Non-enrolment

The first step to use the National Health Insurance in Ghana is to subscribe or enroll in the insurance by agreeing and signing up to become a member of the scheme. Individuals are then entitled to quality health care services and maximize benefits under NHIS (NHIA, 2020). There are factors that determine an individual's decision to sign up for the insurance or not. First, perceptions of individuals regarding the enrolment in health insurance is a major factor. Perceived usefulness of the health insurance determines health insurance subscription. This is where an individual believes that the act of making something functional and effective increases his or her attitude towards the behavior of purchasing insurance (Liebenberg et al., 2012a). According to Brahmana et al., (2018), perceived usefulness motivated people and drives their intention to purchase health insurance because of the perception of health insurance benefits such as reduction of uncertain medication cost in future. The NHIS benefits package in Ghana covers Out-Patient Department (OPD) services, general and specialist consultation reviews, In-Patient Services (IPS), oral health services, eye care service, maternity care, and emergencies (NHIA, 2020). Secondly, the health value of an individual determines one's signing up the health insurance (Brahmana et

al., 2018). Health value is defined here as the health outcome of a patient achieved per dollar spent (Porter, 2010). Good health is valued as an outcome in enrolling in health insurance. Third, perceived risk is another factor where an individual believes that he is protected from risk by making the best use of a resource (Liebenberg et al., 2012a). In this form of perception to enroll in health insurance, anxiety (Berekson, 1972) has a role to play because of the fear to be stricken with illness (Brahmana et al., 2018). Others are not scared of uncertain illness and claim there is no need to enroll in insurance because they do not fall sick (Kusi et al., 2015). Some Ghanaians perceive that, the drugs given to NHIS subscribers are of low quality because of the observation of different drugs given to insured people and those who pay out-of-pocket (Dalinjong & Laar, 2012). This perceived risk serves as a barrier for enrolment.

Also, social networks determine an individual's decision to subscribe to health insurance. Groups formed in communities make decisions and implement them through their participation activities (Fenenga et al., 2014). In this way, a form of trust is created among them and members of the group are easily convinced to undertake an activity. An example is the decision to subscribe to the health insurance by people of Capecoast in the central region of Ghana through social pressure exerted by friends and working environment (Kumi-Kyereme et al., 2017). Consumer information which consists of information regarding the use of health insurance such as payment of premiums, and expected losses (Yirbour, 2011) is also important to increase health insurance enrollees. If the consumer or individual has incomplete information on the health insurance, they will not subscribe to the scheme. In Ghana, one way to manage the situation of an individual's inability to well understand information on entitlements to medications covered by the NHIS is to use social networks in communities as a platform to provide complete information thereby increasing

awareness of the health insurance (Fenenga et al., 2014). Lastly, affordability of the NHIS premium is also one reason for subscribing to the insurance (Kumi-Kyereme et al., 2017). Some Ghanaians could not also subscribe to health insurance because of the high premium paid for registration (Dalinjong & Laar, 2012). This is as a result of the financial capability of an individual that controls one to subscribe to a health insurance (Lee et al., 2010).

2.6 Determinants of NHIS Renewal and Non-renewal

Renewal of health insurance in Ghana involves paying charges to make one eligible to continue the use of the insurance after a speculated time for expiry which is once every year. The knowledge of NHIS subscriber's insurance card's expiry date is one strong determinant to renew insurance (Awudu, 2016). A study by Adu (2019) found that, the likelihood of an individual renewing his or her insurance depends on the source of income used to pay the premium for subscription. These are individuals whose charges for subscription was paid by family members, friends, Non-Governmental Organization (NGO's), and SSNIT contributions were less likely to renew their insurance as compared to the premium paid by themselves. An example is the non-renewal of health insurance by exempt groups of SSNIT pensioners as institutions who promised to pay their processing fees have stop paying (Agyepong et al., 2016). Another factor determining the renewal of health insurance is the rate of health care utilization. Those who utilize health care than those who do not visit health facilities have a high likelihood of renewing their insurance (Duku et al., 2016). This is as a result of varying health conditions of individuals. For example, those suffering from chronic diseases utilize health care or visit health facilities often renew their insurance than

those with acute health conditions or rare illness (Adu, 2019; Atinga et al., 2015). The new initiative of introducing a NHIS mobile renewal (NHIS, 2020) which can be accessed from all mobile networks by dialing a short code (*929#) encourages NHIS renewal. This is because it NHIS members can renew their cards from the comfort of their homes, save money to travel for renewal, and save time used to join long queues.

Others also decide not to renew their insurance because of limited benefits (Boateng & Awunyor-Vitor, 2013) and no benefits from the time they were insured until the insurance expired perceiving the insurance to be a loss of money (Adu, 2019). Some health care services and medications in Ghana are not covered by the NHIS such as cancer treatment other than cervical and breast cancer, heart and brain surgery other than those resulting from accidents, cosmetic surgeries, diagnosis and treatment abroad (NHIA, 2020). Individuals with health conditions which falls under the NHIS health services exclusion list may not renew their insurances because of no or limited benefits from the NHIS. Moreover, service quality by health care providers is also a determinant for health insurance renewal. Subscribers of health insurance have expectations of quality services in health facilities. When their perceptions of quality service are low and their expectations are not met, they become dissatisfied and do not renew their insurance (Jehu-Appiah et al., 2011). This happens because they lose trust and confidence in the health insurance scheme (Kodom et al., 2019). In the health sector, Baker et al. (2008) put forward three dimensions of measuring service quality. These are (i) Accessibility (geographical locations, waiting time, appointment and delays); (ii) Amenities (availability of facilities, quality of food and attractiveness of the physical environment); and (iii) Interpersonal relations, support and cultural appropriateness.

In Ghana, poor service quality in health facilities which negatively affects people's decision to renew their insurance includes waiting longer as compared to uninsured people (Jehu-Appiah et al., 2011; Adu, 2019). In accessing health care with NHIS membership card in Ghana, NHIS subscribers are supposed to present their cards to the person in charge at the out-patient department or front desk of the health facility and the validity of the membership cards is checked by officials of the facility. NHIS subscribers can only assess health care with their cards when there is a confirmation of the validity and details provided by the subscriber (NHIA, 2020). This process causes patients to wait for some time before accessing health care as compared to the uninsured who do not wait for any process but can access health care right away. The longer waiting periods discourages people from renewing their NHIS. The shortage of medications and poor attitudes of health care providers (Atinga et al., 2011) are other poor service quality problems that hinders NHIS members from renewing the membership cards.

CHAPTER THREE

METHODS

3.0 Introduction

This chapter presents the methodology I used for the thesis. I used a systematic review for the data collection. A systematic review is a detailed and thorough study which involves the use of a search strategy deduced with the goal of identifying, critically assessing and synthesizing evidence from relevant studies on a phenomenon (Uman, 2011). I could have collected data from NHIS subscribers, non-subscribers and stakeholders in Ghana. However, due to the covid-19 pandemic, I decided to conduct a systematic reviews of studies for two major reasons. First, it was a safe method of reducing the risk of getting into contact with the virus whilst finding evidence. Collecting qualitative data from many people continuously especially at health centers could lead to the spread of the virus as there is a high chance of being exposed to the virus the more you go out and meet people. The lockdown in the country and other restrictions to reduce overcrowding at health centers would have made it difficult to collect data. Second, there are available research on the use of National Health Insurance Scheme in Ghana using qualitative methods that answers the research questions so, it was possible to review them.

The systematic review method entails the procedure to solve the research problem which was formulated by assessing variation in statistics of Ghanaians subscribing and renewing their health insurance and reported factors responsible for the difference in the number of Ghanaians using the health insurance. Scholars have used methods such as assessment studies and surveying Ghanaian populations to solve this problem. A systematic review is a preferred method to solve the problem

because it is more of a compiled current knowledge obtained from carefully identifying and using high quality comprehensive studies, which responds to the research questions to make the evidence more accessible to decision makers in Ghana and add on to evidence-based practice in the use of NHIS. The chapter provides the inclusion and exclusion criteria, the search strategy, quality assessment or appraisal, data extraction, data synthesis and analysis and presentation of the results.

3.1 Inclusion and Exclusion Criteria

Setting boundaries or defining the criteria used to include and exclude studies must be decided before conducting a systematic review. Inclusion criteria are key features and properties of the target population that will be used to answer the research question to provide results. The exclusion criteria on the other hand are defining reasons for excluding studies based on features of the study sample which are potential target population or meet the inclusion criteria but have other features that will interfere with the success of the desired study results (Patino & Ferreira, 2018). In this study, different explicit criteria were used to determine whether a study will be included or excluded in systematically reviewing the use of National Health Insurance Scheme in Ghana.

The type of studies that was included in the systematic review was studies that employed a qualitative research method in the rural and urban setting of Ghana. Qualitative studies were used in the systematic review because of the in-depth information or evidence provided which is derived from observations, interviews and meaning and interpretations of respondents or participants of the research. The nature of the research questions to be answered requires an understanding on a wide range of issues that cannot be well explained and understood quantitatively. Conducting qualitative systematic reviews is also beneficial because it offsets the challenges of ethical

approval and recruiting participants and lengthy time in data analysis in primary research (Clark, 2016). Studies rated as moderate and high in terms of quality using the critical appraisal method were only included in the systematic review (Table 4.1.1). This is because studies rated as low quality is as a result of flaws in its methodology and findings which negatively influences the interpretation of data and provides inadequate insight into the situation under study (Dixon-Woods et al., 2007). Articles written only in English language using the year of publication from 2013 to 2020 was included which gave a summarization of updated and emerging factors that promotes and hinders citizens in subscribing and renewing the health insurance scheme. Studies that purposely provided information on enrolment, non-enrolment, renewal and non-renewal of NHIS by members, non-members and stakeholders of NHIS were included in the systematic review.

Using the exclusion criteria, articles from predatory sources was excluded from the systematic review. Predatory journals are journals that publish articles at a fee without assessing the quality such as plagiarism and ethics approval (Grudniewicz et al., 2019). Some characteristics of such journals are (i) the journal using an unclear type of peer review; (ii) a journal which is an open assess but not listed in the Directory of Open Access Journals (DOAJ); (iii) the publisher of this open access does not belong to the Open Access Scholarly Publishers Association (OASPA); (iv) published studies that are already published in other platforms without providing appropriate credit; (v) published papers that are not academic; (vi) the publisher not providing appropriate contact information and its location; and (vii) the publisher does not or improperly use International Standard Serial Number (ISSN) and Digital Object Identifier (DOI) numbers. Other health insurance schemes from different geographic settings apart from Ghana was not used. Also, the detailed description of health conditions of participants in the studies was excluded. Grey

literature which are publications not published commercially (Osayande & Ukpebor, 2012) consisting of reports, policies, website articles, newspaper, conference papers, thesis were excluded. This is because they are not peer reviewed and has a high risk of providing studies with low quality and will in turn influence and affect the results of the systematic review.

3.2 Search Strategy

The search strategy is important because it determines the identification or missing of relevant information. The research questions and inclusion criteria provide the basis for the search strategy to retrieve relevant studies (Aromataris & Riitano, 2014). The identification of relevant articles included three search strategies of using internet search engines, keywords or key terms, and screening for eligibility and inclusion. Internet search engines such as google.com and google scholar served as a source of information on the use of National Health Insurance Scheme in Ghana. The reference list of studied identified from the search engines was further searched to identify relevant information. This procedure provides essential additional studies with strong electronic database searches (Hammerstrom, Wade & Jorgensen, 2010). Secondly, an exhaustive search of published studies was conducted using search terms which involves the use of keywords or key terms and phrases. The search terms were derived from concepts in the research question and guided by the inclusion and exclusion criteria. Keywords and phrases such as “Ghana National Health Insurance Scheme”, “Insurance”, “motivations”, “barriers”, “promoting factors of NHIS”, “hindering factors of NHIS”, “NHIS enrolment”, “NHIS renewal” and “health care system”. These keywords and phrases were then search for in the titles and abstracts of the studies retrieved from the internet search engines. The identified studies were further searched by screening the studies for eligibility and inclusion in the systematic review. Screening was done by reading the titles and

abstracts of the studies identified and excluding irrelevant studies that do not meet the inclusion criteria.

3.3 Quality Assessment

The retrieved studies eligible for inclusion with the help of the search strategy must be accessed in terms of quality for final inclusion and data extraction. Quality assessment is also known as critical appraisal. Critical appraisal is the process of systematically assessing a research to examine the accuracy, findings, and relevance of its evidence before applying the research to decide (Hill & Spittlehouse, 2003). It is used to ensure that data in included studies are accurate (Popay et al., 2006), assess the trustworthiness and relevance of the evidence or outcome (Dickson et al., 2014), and allows reasonable conclusions to be made about the strength of the review (Victor, 2008). The quality assessment is also done to reduce error or bias in data analysis. Errors or bias can occur in citations, articles, geographic settings, and reporting results. According to Hannes (2011), quality assessment of qualitative research must be considered or characterized with four core elements. These core elements are;

i. Credibility: it addresses internal validity which seek to ensure that studies measures or tests what is actually intended. Credibility is defined as the confidence that can be placed in the truth of the research findings (Holloway & Wheeler, 2002; Macnee & McCabe, 2008). It is accessed by evaluating whether the data represented in the study relates with the views of the participants of the study. The use of verbatim quotes of the participants, time sampling and interview techniques can be used as an evaluation technique to test for credibility.

ii. Transferability: it addresses external validity which is concerned with the extent to which the findings of one study can be applied to other situations. Transferability refers to the degree to which the results of qualitative research can be transferred to other contexts with other respondents. It is the interpretive equivalent of generalizability (Bitsch, 2005; Tobin & Begley, 2004). It can be evaluated by providing details of the target groups of the research, providing background information, and demographics.

iii. Dependability: According to Bitsch (2005), dependability refers to "the stability of findings over time". Dependability involves participants evaluating the findings and the interpretation and recommendations of the study to make sure that they are all supported by the data received from the informants of the study (Cohen et al., 2011; Tobin & Begley, 2004). It is also the process where the process of the research especially the methods and decisions of the researcher is logical, traceable and clearly documented. Some techniques used to evaluate the dependability of a research includes peer review and ensuring critical reflexivity that is the researcher being aware of his/her contribution to the construction of meanings (Ackerly & True, 2010) and how it influences the data.

iv. Confirmability: refers to the degree to which the results of an inquiry could be confirmed or corroborated by other researchers (Baxter & Eyles, 1997). It can be evaluated by providing background information of the researcher, reflexivity and school of thought.

I used peer reviewed publications as an approach to ensure the quality of the included studies because peer reviewed articles are reviewed by experts. To confirm the quality of the peer reviewed

studies, I used quality assessment questions in a form (Appendix II) which includes the use of instruments to assess the characteristics of qualitative research. These instruments used to assess the quality of qualitative research includes the ethical considerations of the research, relevance of findings, the use of appropriate methods and clarity of reporting (Cohen & Crabtree, 2008). Critical appraisal instruments used in this study were clarity in the aim of the research, ethical consideration, appropriate sampling method, appropriate data collection, appropriate data analysis and clarity in research results. Quality assessment instruments were created in a table form and numbers were assigned to the instruments to assess the quality of the studies using total scores (Table 4.1.1).

3.4 Data Extraction

Data extraction is the process of obtaining key information in journal articles in a structured form (Schmidt et al., 2021). Extracted data is characterized by details of the methodology and findings (Victor, 2008). I extracted data by capturing the necessary details in the study characteristics and findings of the included studies. The data extraction was initially planned and guided to answer the research questions and inform the type of data analysis to be adopted. This strategy helped to identify the kind of data I should extract. The extraction is either in a written form or in the form of an electronic spreadsheet (Harris et al., 2014). Based on the research questions and applying the inclusion and exclusion criteria, I extracted data with the aid of a written data extraction form (Appendix I). The data includes the author (s), year of publication, title, aim, sampling method, sample size, study settings and the qualitative outcomes of NHIS enrolment, renewal, non-enrolment and non-renewal in the included studies.

3.5 Data Synthesis and Analysis

Synthesizing qualitative data involves the aggregation, integration and interpretation of the findings in the qualitative studies (Sandelowski & Barroso, 2007). Data was synthesized by reading the assembled retrieved information or findings in the data extraction form and coding the data through qualitative data analysis. Coding in qualitative analysis involved the identification of concepts in the text and quotations of the results of included studies. Quotations are the captured views of research participants which represents their own words to demonstrate how the findings of the study was obtained (Patton, 2002). The codes assigned in the text and quotations described the promoting and hindering factors of NHIS usage as well the measures to improve the use of the insurance scheme. I later grouped these identified concepts into categories and subcategories. The similarities and differences in the meanings of the concepts was searched and mapped into major themes.

3.6 Presentation of Results

In a logical manner, I presented and described the results. I used a Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) flow diagram to show how the included studies were finally identified (Figure 4.1) using the search strategy, inclusion and exclusion criteria. The PRISMA flow diagram consists of phases such as identification, screening, eligibility and inclusion (Zurynski, 2014). I also used a thematic and narrative form of synthesis to present the results. Narrative synthesis involves the description of outcomes with the use of words and texts to explain findings of included studies to draw conclusions and thematic synthesis is the process of identifying themes from quotations or narratives (Popay et al., 2006). I provided statements and a narration of details of the results under the major themes identified. The experiences and

perceptions of Ghanaians was presented to identify factors the promotes and hinders the use of health insurance and the suggested measures to improve NHIS usage.

CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents the results of the systematic review by answering the research questions of the study. It provides the identification of included studies using the PRISMA flow diagram for illustration, quality assessment of qualitative research, characteristics of the included studies, promoting factors of NHIS (enrolment/subscription and renewal), hindering factors of NHIS (non-enrolment/non-subscription and non-renewal) and measures to improve the usage of NHIS.

4.1 Identification of Included Studies

The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) process was used to identify included studies. A total number of 231 studies comprising of journal articles, grey literature and books were identified using the google.com and google scholar search engines. Google.com produced 75 studies and google scholar produced 156 studies. The inclusion and exclusion criteria were applied to each study to remove 200 irrelevant studies. Duplicate studies which were 3 in number were also removed and as a result, 28 articles were then retrieved out of the 231 studies. A screening process was conducted on the 28 studies to obtain studies for eligibility. A total number of 16 studies were excluded after screening the titles and abstracts of the studies which did not meet the inclusion and exclusion criteria. Afterwards, 12 articles were eligible for a full text review of which the inclusion and exclusion criteria was reapplied. A quality assessment procedure was conducted during the process of full text review of which 6 studies were excluded. Finally, a total number of 6 peer reviewed articles met the inclusion criteria (Figure 4.1).

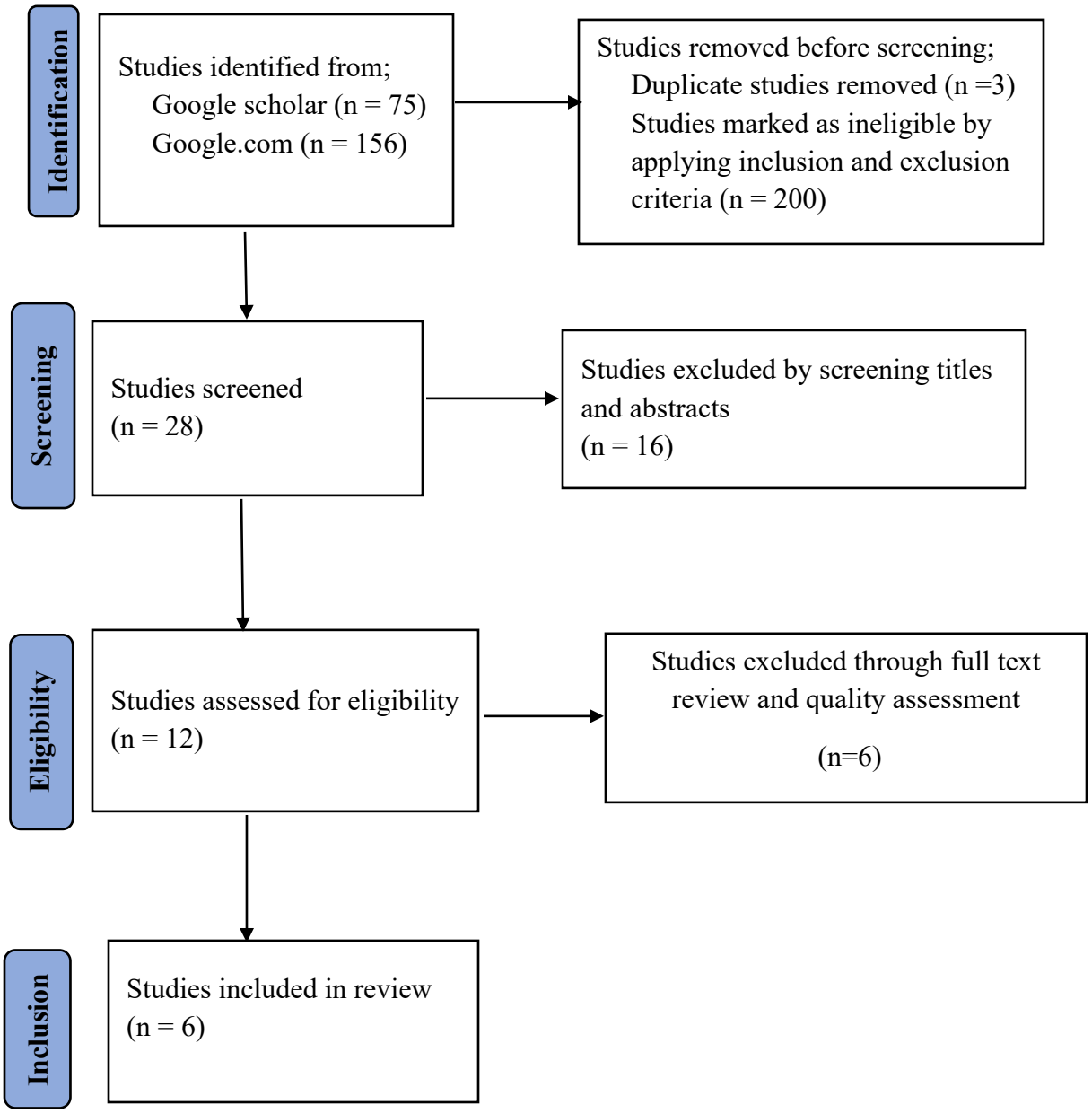

Figure 4.1: PRISMA Flow Diagram showing Identification of Included Studies

4.1.1 Qualitative Research Quality Appraisal

Quality assessment of studies was conducted to select eligible studies for final inclusion. The quality of the 6 peer reviewed qualitative studies assessed (Table 4.1.1) proves the validity of the journal articles used as included studies for the systematic review. The first instrument for quality assessment that is the aim of the study was checked whether it was clearly stated. Ethical considerations such as ensuring confidentiality and seeking permission for community entry and respondents and informant interviews was checked. The sample size and sampling method determined for data collection was noted. The data analysis method of transcription, coding of quotations and assigning themes to produce clear results was also checked. All studies were rated as high in terms of assessing quality except Barimah & Mensah (2013) study where the number of data collected were few that is 11 respondents and data analysis made was not clear. A total number of 11 participants were interviewed consisting of NHIS subscribers, stakeholders, non-members, and health service providers. A sample size less than 30 can be as a result of saturation of data or a limited number of people usually informants for the study. For qualitative studies in such a research with the aim to examine the views of members, administrators and health care providers in two regions of Ghana, a sample size of 30 to 50 deemed appropriate for the study. There was no justification using 11 respondents for the study as well. The study did not also clearly state how the 11 dataset was analysed hence rated as moderate in terms of quality.

Table 4.1.1: Quality Appraisal of Qualitative Studies

Author (s) & year	Clear aim	Ethical consideration	Appropriate/clear Sampling and data collection	Appropriate/ clear data analysis	Clear results	Total score	Quality assessment measure
Agyepong, I. A., Abankwah, D. N. Y., Abroso, A., Chun, C., Dodoo, J. N. O., Lee, S., ... & Asenso-Boadi, F. (2016)	1	1	1	1	1	5	High
Barimah, K. B., & Mensah, J. (2013)	1	1	0	0	1	3	Moderate
Fenny, A. P., Kusi, A., Arhinful, D. K., & Asante, F. A. (2016).	1	1	1	1	1	5	High
Kipo-Sunyehzi, D. D., Ayanore, M. A., Dzidzonu, D. K., & AyalsumaYakubu, Y. (2020).	1	1	1	1	1	5	High
Kodom, M., Owusu, A. Y., & Kodom, P. N. B. (2019).	1	1	1	1	1	5	High
Kumi-Kyereme, A., Amu, H., & Darteh, E. K. M. (2017)	1	1	1	1	1	5	High

(1=Yes and 0=No, a total quality score of 1 is rated as low, 2 to 3 is moderate and 4 and 5 is high

4.1.2 Characteristics of Included Studies

The studies were conducted in 8 regions of Ghana that is Brong-Ahafo, Upper East, Volta, Greater Accra, Northern, Central, Eastern and Ashanti region of Ghana (Table 4.1.2). Three (3) zones of Ghana namely the coastal, forest and savannah zones were also study settings of the research. Districts within these regions and zones studied were made up of 3 urbans and 8 rural districts. Five studies (Agyepong et al., 2016; Fenny et al., 2016; Kipo-Sunyehzi et al., 2020; Kodom et al., 2019, Kumi-Kyereme et al., 2017) employed the purposive sampling method and three studies (Agyepong et al., 2016; Kipo-Sunyehzi et al., 2020; Kodom et al., 2019) adopted the snowball sampling method to determine the sample size for data collection. The publication date of the peer reviewed articles ranged from 2013 to 2020 indicating an updated form of research. The study population also ranged from 11 to 56 participants consisting of National Health Insurance Scheme members and non-members and stakeholders or informants such as administrators and health officials. Based on the level of NHIS usage, four studies (Agyepong et al., 2016; Barimah & Mensah, 2013; Kipo-Sunyehzi et al., 2020; Kumi-Kyereme et al., 2017) researched on NHIS subscription or enrolment. Four studies (Agyepong et al., 2016; Fenny et al., 2016; Kumi-Kyereme et al., 2017; Barimah & Mensah, 2013) dealt on NHIS non-subscription or non-enrolment. In terms of NHIS renewal, it was found in four studies (Agyepong et al., 2016; Barimah & Mensah, 2013; Kipo-Sunyehzi et al., 2020; Kodom et al., 2019). Lastly, all the six included studies researched on non-renewal of NHIS.

Table 4.1.2: Characteristics of Included Studies

Author (s) & year	Title	Aim	Study setting	Sampling size and method	Level of NHIS usage
Agyepong, I. A., Abankwah, D. N. Y., Abroso, A., Chun, C., Dodoo, J. N. O., Lee, S., ... & Asenso-Boadi, F. (2016)	The "Universal" in UHC and Ghana's National Health Insurance Scheme: policy and implementation challenges and dilemmas of a lower middle income country	to understand the stagnation of NHIS enrollment and implications for NHIS policy, program design and implementation towards UHC.	1 municipality and rural district (confidential) in Volta region	35 respondents, purposive and snowball sampling	Enrolment, Non-enrolment, Renewal, and Non-renewal
Barimah, K. B., & Mensah, J. (2013)	Ghana's National Health Insurance Scheme: Insights from Members, Administrators and Health Care Providers	To examine the practice of NHIS using the views of members, administrators and health care providers	1.Sunyani and Nkoranza districts (Brong Ahafo region) 2.Bolgatanga and Talnesi-Nandon district (Upper East region)	11 respondents	Enrolment, Non-enrolment, Renewal, and Non-renewal
Fenny, A. P., Kusi, A., Arhinful, D. K., & Asante, F. A. (2016).	Factors contributing to low uptake and renewal of health insurance: a qualitative study in Ghana.	To understand barriers to NHIS enrollment	1.Abura-Asebu-Kwamamkese district (coastal zone, Central region), 2. Kwaebibirem District (coastal zone, Eastern region), 3.Ejisu-Juaben Municipal (forest azone, Ashanti region),	40 focus group discussion and 46 stakeholder interviews, purposive sampling	Non-enrolment and Non-renewal

			4.Asutifi district (forest zone, Brong Ahafo region), 5.Savelugu/Nanton district (Savanna region)		
Kipo-Sunyehzi, D. D., Ayanore, M. A., Dzidzonu, D. K., & AyalsumaYakubu, Y. (2020).	Ghana's Journey towards universal health coverage: the role of the national health insurance scheme	To examine NHIS effort in achieving UHC	Tamale metropolis (Northern region)	30 respondents, purposive and snowball sampling	Subscription, Renewal, and Non-renewal
Kodom, M., Owusu, A. Y., & Kodom, P. N. B. (2019).	Quality healthcare service assessment under Ghana's national health insurance scheme.	To examine clients experiences with NHIS services	Greater Accra region	56 participants, random, purposive and snowball sampling	Renewal and Non-renewal
Kumi-Kyereme, A., Amu, H., & Darteh, E. K. M. (2017)	Barriers and motivations for health insurance subscription in Cape Coast, Ghana: a qualitative study.	To explore motivational factors and barriers to NHIS subscription	Cape Coast metropolis (Central region)	30 respondents, purposive sampling	Subscription, Non-subscription, and Non-renewal

4.2 Promoting Factors of NHIS Usage

Factors that support, encourage and further the progress of the usage of NHIS by Ghanaians are the promoting factors of NHIS usage. These factors are found or embedded in both the subscription or enrolment of NHIS and the renewal of health insurance in Ghana. This is because enrolment and renewal confirm the decision and continuity to use the health insurance. Six factors (exemption policy, health security, right knowledge on NHIS, affordability of annual renewal premium, healthcare benefits and the role of NHIS staff) have been found in the included studies to promote the use of the National Health Insurance Scheme. Four studies (Agyepong et al., 2016; Kipo-Sunyehzi et al., 2020; Barimah & Mensah, 2013; Kumi-Kyereme et al., 2017) gave information on factors promoting both enrolment and renewal of NHIS.

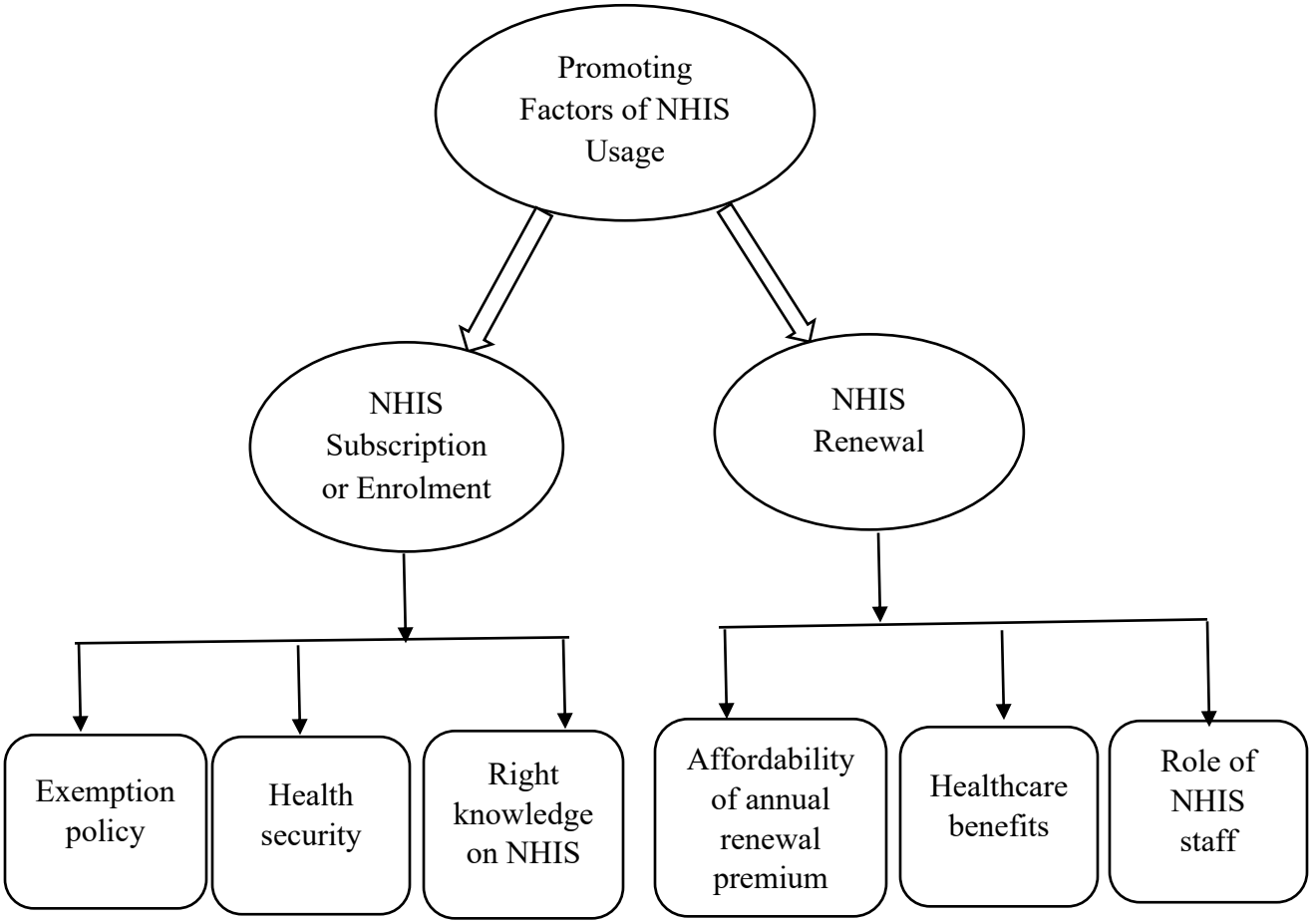

Figure 4.2: Promoting Factors of NHIS Usage

Source: Author's own construct 2021, based on included studies

4.2.1 NHIS Subscription/ Enrolment

Subscribing or enrolling in the NHIS is the first step to be insured in accessing health care in Ghana. Factors that have been found to promote the activity of enrolment in NHIS are the exemption policy, health security and right knowledge on NHIS (Figure 4.2).

a. Exemption Policy

Four studies (Agyepong et al., 2016; Kipo-Sunyehzi et al., 2020; Barimah & Mensah, 2013; Kumi-Kyereme et al., 2017) have identified groups of people in Ghana who are exempted from paying annual premiums to renew their health insurance once they subscribe to the scheme. These exempt groups of people are selected based on their status in the society as vulnerable groups and health conditions. They tend to enroll or subscribe more to the health insurance because of this exemption policy since they are not supposed to pay for NHIS renewal premium after subscribing to the scheme. Those who are classified as vulnerable and exempted from payment of contributions under the scheme according to Act of Parliament (section 29) are children and teenagers (under 18 years), pregnant women, SSNIT pensioners, the poor, and the aged (70 years and above). Kipo-Sunyehzi et al. (2020) study rated children and teenagers to be the most enrolled group in Ghana, followed by pregnant women, the aged, the poor and SSNIT pensioners.

b. Health Security

Ghanaians enroll in NHIS because of health related uncertainties such as unforeseen illness and the inability to know whether one can pay for medical treatment at the time of illness (Kumi-Kyereme et al., 2017). This is a form of health security as people plan ahead for health challenges and money for treatment which are not known or informed when it happens. Respondents in Kumi-Kyereme et al. (2017) claim they are not worried when they fall sick because they have health insurance which serves as a life safeguard to help them to access and pay for healthcare services and treatment. Even if the health insurance does not cover all expenses, the amount to be paid at the health facility is considered as little. Health security has also been a motivator for people such as farmers as it has been observed in Agyepong et al. (2016) study that during bountiful harvest, more of these farmers enroll in NHIS to get secured.

c. Right knowledge on NHIS

Only one study (Agyepong et al., 2016) found knowledge on NHIS to be an important factor as the information provided to the public concerning the health insurance determines their level of enrolment. The use of health insurance is promoted only if the knowledge the public acquire as a result of the information received concerning the health insurance is right. This information is received mostly from the public and other political leaders especially the leaders from the opposition party. At the initial stages of implementing NHIS in Ghana, there were political debates about the political party owning the health insurance scheme and which political party members are to benefit from the health insurance policy. These political debates were as a result of information received that, the health insurance belonged to the members of the political party which implemented the health insurance scheme. This information negatively affected the number

of people enrolling in NHIS at that time. The right information about the health insurance being non-partisan and belonging to all Ghanaians circulated especially when the opposition party came to power and also owned the scheme. Due to this, the enrolment numbers of NHIS increased.

4.2.2 NHIS Renewal

Every Ghanaian who has subscribed to the health insurance is expected to renew their insurance cards yearly by paying a renewal premium to ensure continuity of the use of the health insurance. Factors that have been found to promote the renewal of NHIS are affordability of annual renewal premium, healthcare benefits and the role of NHIS staff (Figure 4.2).

a. Affordability of renewal annual premium

Most Ghanaians assert that, they renew their health insurance because the yearly premium for renewal to ensure continuity of the use of the health insurance is cheap, low, manageable, and affordable (Kumi-Kyereme et al., 2017; Kipo-Sunyehzi et al., 2020). A comparison was made by a respondent in Kipo-Sunyehzi et al. (2020) study to prove the low cost of NHIS renewal premium and its affordability. The comparison was that, combining the cost of health facility attendance cards, lorry fare to health facilities, cost of treatment, diagnoses and drugs, as compared to the cost of the annual renewal premium is very cheap and affordable. It was realized that the annual renewal premium was just a penny.

b. Healthcare benefits

The benefits that come with being insured at health facilities promotes the renewal of NHIS for both in-patients and out-patients. Specifically, some Out-Patient Department (OPD) healthcare services such as consultations, reviews, laboratory test, x-rays, ultra sound scanning, physiotherapy, accommodation, antenatal, and child delivery are covered under the NHIS and free for patients (Barimah & Mensah, 2013). Health conditions of people that are fully covered by the NHIS includes pregnancy (Agyepong et al., 2016; Kipo-Sunyehzi et al., 2020; Kumi-Kyereme et al., 2017), dental problems, physiotherapy, symptoms of HIV/AIDS, tuberculosis and mental illness (Barimah & Mensah, 2013). These benefits have led to recommendations and encouragement from individuals to their families, friends, colleagues to renew their health insurance cards. These recommendations have motivated other people to renew their health insurance (Kumi-Kyereme et al., 2017).

c. Role of NHIS staff

Agyepong et al. (2016) study has identified the role of NHIS staff in promoting renewal of NHIS cards of NHIS subscribers. The role of discretion and risk taking by NHIS staff has enabled some people to renew their health insurance. NHIS managers sometimes find themselves in ethical dilemmas in their duties. They enforce some rules to encourage renewal which is not part of the national policy and can lead to losing their jobs. The rules enforced three months waiting period for subscribers who forget to renew their cards on time. NHIS Subscribers cannot benefit from their health insurance until three months' time when renewal is not done on the said date which is normally indicated on the health insurance cards. Another discretion used by NHIS staff is the way of determining and categorizing Ghanaians as poor people or indigents to benefit from the

exemption policy of not paying a premium for renewal. Even though the Act 650 (section 38) mandates the Minister on the advisory council to prescribe a means test to determine those who are poor in the society, there were no clear guidelines to identify the poor in the society. Discretion was used to take people out of such category and add people to the poor or indigent category. A staff in the study also decided to go to the villages and collect the cards of the NHIS subscribers who are poor and encourage them to renew for free. NHIS staff were also praised by community members for using their discretion to interpret the national policies and regulations of the health insurance which aided them to enrol and renew their health insurance. The staff of NHIS also used political leaders to target individuals in the informal sector to enrol. An example was the strategy of a NHIS staff who convinced a Member of Parliament (MP) to pay 42% of the premium for a community and this lead to long queues as people paid the rest of the money to enrol in NHIS.

4.3 Hindering factors of NHIS Usage

Factors that make it difficult for Ghanaians to use the health insurance are considered as hindering factors of NHIS usage. These hindering factors either cause individuals not to enrol in NHIS or not to renew their health insurance. Therefore, hindering factors of NHIS can be found in subcategories of non-enrolment or non-subscription and non-renewal. A total number of 10 factors were found to hamper the use of NHIS namely, individual health status, negative word of mouth, societal norms, cost, poor responsiveness, illegalities, unmet expectations, unaffordability, discrimination, and forgetfulness. All the included studies provided factors for hindering the use of health insurance. four studies (Fenny et al., 2016; Agyepong et al., 2016; Kumi-Kyereme et al., 2017; Barimah & Mensah, 2013) provided barriers to enrolment or subscription to health insurance and six studies (Fenny et al., 2016; Agyepong et al., 2016; Kumi-Kyereme et al., 2017; Kipo-

Sunyehzi et al., 2020; Kodom et al., 2019; Barimah & Mensah, 2013) provided factors for non-renewal of health insurance.

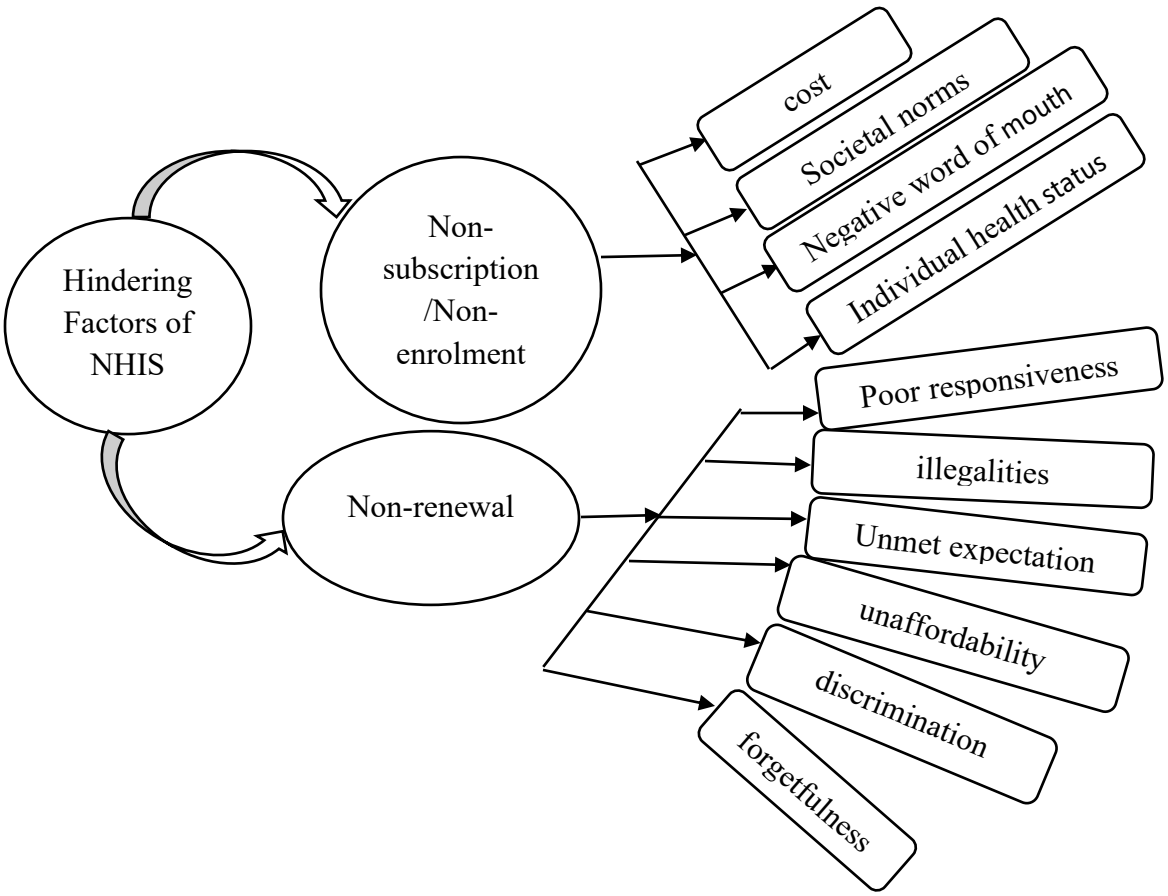

Figure 4.3: Hindering Factors of NHIS Usage

Source: Author's own construct 2021, based on included studies

4.3.1 Non-subscription/ Non-enrolment

The refusal of individuals to subscribe or enroll to become a member of the NHIS is as a result of factors emanating from individual health status, negative word of mouth, societal norms, and cost (Figure 4.3).

a. Individual health status

Two studies (Fenny et al., 2016; Agyepong et al., 2016) found in their research that, some individuals do not subscribe to the NHIS because, upon assessing their health conditions over the past years, they have concluded that they are strong, healthy and rarely fall sick. Due to this personal assessment, there was no need to enroll in the health insurance scheme. Another factor that hinders such individuals is the fact that, they will pay renewal premium yearly and would never use the insurance (Fenny et al., 2016). Even if they fall ill, there have other remedies from herbal sources to cure them. Agyepong et al. (2016) study found out the group of people who claim they are strong and do not need to enroll in health insurance were the youth and non-SSNIT subscribers who were between the ages of 18 and mid-40s in the informal sector.

b. Negative Word of Mouth

The negative experiences and dialogues of those already insured in the NHIS hinders those who have not subscribed from enrolling in the scheme. One of such experiences expelling others is delays in NHIS services. Respondents in Fenny et al. (2016) and Agyepong et al. (2016) study have not subscribed to the health insurance because there were delays in processing and issuing of NHIS identity cards to subscribers and they had to pay for medical treatment because of that. An instant biometric card system was introduced to solve such delays but there were still negative

reports of the system not speeding up. This was attributed to challenges faced by the insurance scheme such as inadequate funding, inadequate staff and logistics (Agyepong et al., 2016) and delays in reimbursement of claims from National Health Insurance Authority (NHIA) (Fenny et al., 2016). Another negative perception influencing others from not enrolling in NHIS is the perception of poor quality health care for insured people (Fenny et al., 2016; Agyepong et al., 2016; Kumi-Kyereme et al., 2017; Barimah & Mensah, 2013).

Poor quality in healthcare was perceived in terms of services such as responsiveness and the quality of medications. Some insured patients are not attended to properly as an example was cited in Fenny et al. (2016) study, where pregnant women were insulted by the staff of healthcare facilities. Kumi-Kyereme et al. (2017) study also reported the negative attitude of nurses in responding to the needs of insured patients. SSNIT contributors preferred to go to private hospitals without insurance for better quality healthcare services rather than government hospitals where they were insured with health insurance despite the deduction of 2.5% of their contributions into the NHIS. The absence of some basic healthcare resources such as laboratories, scans and few doctors attending to many patients is also a barrier to enrolment (Agyepong et al., 2016). The quality of drugs given to insured people was also perceived as low. Respondents in Kumi-Kyereme et al. (2017) explained that the drugs given to them were very cheap and does not cure their diseases and they are told to buy the expensive ones outside the hospital. On the other hand, when one pays out of the pocket, the person is attended to within a short time with prescribed quality drugs which cures the person within 3 to 5 days. The exemption policy which was widely known to cover vulnerable groups was not applicable at health facilities such Korle Bu Teaching hospital associated with exorbitant cost and only applicable to district hospitals associated with low cost

(Barimah & Mensah, 2013). This unwritten rule of the exemption policy of the NHIS serve as a hindrance to other vulnerable groups to enrol in the health insurance.

c. Societal Norms

Norms which serve as standards in the Ghanaian society hinders individuals from enrolling in the health insurance scheme. Cultural norms (Fenny et al., 2016) and religious norms (Fenny et al., 2016; Agyepong et al., 2016) in Ghana constrained members of the society. Culturally, married men are supposed to provide money to the household. The inability of the man to provide money to enrol in the health insurance hinders the NHIS subscription of the household (Fenny et al., 2016). Religious norms also have a role to play in NHIS non-subscription. For instance, in the Islamic religion, married women are supposed to ask permission from their husbands before going out of their homes. Their decision to move out of the home to enrol in NHIS is impeded by the negative decision of the husband (Fenny et al., 2016). Also, in Christianity, the "First Church" discourages members from enrolling in health insurance as they were against biomedical care in health facilities (Agyepong et al., 2016).

d. Cost

Three parameters were identified as cost to hinder the enrolment of NHIS by Ghanaians. These are cost in terms of money for NHIS subscription (Agyepong et al., 2016), time (Kumi-Kyereme et al., 2017; Agyepong et al., 2016) and distance to travel (Fenny et al., 2016; Agyepong et al., 2016). The registration fees for enrolment were high for some community members especially peasant farmers therefore serving as a barrier to enrolment (Agyepong et al., 2016). The time spent

in enrolling in NHIS is consuming and discourages people from registering. People spend almost 10 hours whilst joining queues to get registered in the health insurance (Kumi-Kyereme et al., 2017). Some do not also have the time for registration due to personal reasons. An example is the case of farmers who very busy on their farms during the raining season. There is no time to go to NHIS offices to enrol in the health insurance (Agyepong et al., 2016). The cost involved in distance to travel has to deal with the poor road networks and long distances in rural areas to travel to health facilities which are not nearby. This cost in distance to travel does not motivate these disadvantaged people in the rural areas to enrol in NHIS (Fenny et al., 2016; Agyepong et al., 2016).

4.3.2 Non-renewal

Health insurance subscribers who have failed to renew their insurance once a year after the expiry of their insurance is caused by factors such as poor responsiveness, illegalities, unmet expectations, unaffordability, discrimination, and forgetfulness (Figure 4.3).

a. Poor responsiveness

The quality of reacting quickly and positively to NHIS subscribers at health facilities and NHIS registration offices is poor and has discouraged others from renewing their health insurance. The waiting time is a major barrier to renewal of health insurance. SSNIT contributors despite their 2.5% deductions of their social security funds into the NHIS fund do not renew their cards because of the long queues at registration centres which takes a lot of time (Agyepong et al., 2016). At the health facilities, waiting time also causes problems for NHIS renewal. The time spent in joining queues to check the validity of one's insurance card takes a very long time. After that process, the

time spent in queues to also meet the doctor at the hospital is also consuming (Kodom et al., 2019, Kumi-Kyereme et al., 2017). Another form of waiting is the delay in issuing renewed cards as a respondent in Fenny et al. (2016) study renewed his NHIS identification card three times but has not received the card and later gave up on the health insurance. In some cases, when the insurance cards finally come, some of them get expired. Responsiveness on the part of staff of health facilities staff especially nurses was identified to be a barrier because their attitude towards patients was poor. Respondents complain that, whether you are young or old, they are shouted at by these staff (Agyepong et al., 2016). The nurses were not also friendly and were distracted by their mobile phones during the time of work (Kodom et al., 2019).

b. Illegalities

Practices such as corruption and untruthfulness on the part of health insurance officials hinders NHIS renewal. NHIS registration agents were known to collect money for services which were free. People do not renew their cards as they do not have extra money to pay for such free services (Agyepong et al., 2016). In Ghana, medicines that are not available at health facilities but are on the list of NHIS medicine list can be obtained from a private pharmacy which have partnered with NHIS or credentialed by NHIS. These credentialed private pharmacies also involve in illegalities. They are in the practise of giving substitute uninsured drugs to patients as the patients are told the prescribed insured drug is unavailable which is untrue. They also charge more than the actual price of the drug and discredit the NHIS drugs by telling patients those drugs are not good in order to sell their branded drugs or drugs closer to expiry date (Barimah & Mensah, 2013). Illegal activities are also practised by the public as some Ghanaians impersonate some NHIS enrolees to access free

health care. This makes the NHIS financially unsustainable to provide quality services to improve NHIS renewal.

c. Unmet expectations

People have expectations towards benefits accrued from NHIS because of the knowledge they have on the health insurance scheme. Unfortunately, these expectations are not met and hindered NHIS subscribers from renewing their health insurance. One unmet expectation is that, NHIS covers traffic accidents but complications such as orthopedic problems that comes as a result of the traffic accident is not covered (Barimah & Mensah, 2013). Another knowledge people have about NHIS was that, once insured, all or at least health care services would be free. They perceived "free" healthcare services and medications such as free drugs, free laboratory test, and free urinal and blood test (Agyepong et al., 2016; Kodom et al., 2019). However, some medical conditions were not covered and some medications were not available when they visited the health facilities but was observed that, the health insurance covered only cheap drugs and consultation. This situation caused mistrust of the NHIS.

d. Unaffordability

The annual premium paid to renew insurance is perceived to be expensive for some people (Kipo-Sunyehzi et al., 2020). Agyepong et al. (2016) study identified poverty and high dependency level as a result of large family size as a hindrance to NHIS renewal. These kinds of families are mostly found in the rural areas and subscribe together. When their health insurance expires, their large numbers make it difficult for them to renew their insurance due to the increase of amount of premium to be paid. Their source of income which is mostly from their seasonal farming makes it difficult to renew health insurance. Some people who were not able to afford the annual renewal

premium suggested they should be allowed to pay in installments or better still make it free for them (Kipo-Sunyehzi et al., 2020).

e. Discrimination

Health insurance is not renewed by some people as they feel discriminated at health facilities. For instance, Muslim women who are noted to wear "hijab" are not treated properly and insulted for giving birthing often. They are threatened to pay for health care services and medications even though they are exempted from paying for such services. Others are also discriminated and treated badly because of their inability to speak a preferred language at the health facility. The English and Ewe language in Agyepong et al. (2016) study in the Volta region recorded such discrimination based on language. NHIS subscribers also feel discriminated because of the exemption policy covering some specific group of people. They feel the scheme was for the benefit of the exempted groups but not to other groups in the country of which they belong to.

f. Forgetfulness

Renewal of NHIS is done once a year and most individuals do not remember their expiry dates of their health insurance which is indicated on the NHIS identification cards. They later remember to renew only when they get to health facilities when they are ill (Agyepong et al., 2016).

4.4 Suggested Measures to Improve NHIS Usage

The included studies have suggested five measures to improve the use of health insurance in Ghana. The measures are aimed to maintain and increase health insurance subscription and renewal and also to eliminate barriers to NHIS enrolment and renewal. These measures are

financial support, innovation, public education, assessments, and partnerships. These suggested measures were mostly recommended to the Government of Ghana, the NHIA, and the Ghana Health Service.

i. Financial support

Kodom et al. (2019) suggested that a consistent financial support from the Government of Ghana to pay arrears and claims of health service providers and putting in place clinical audit mechanisms will improve the quality of health care services provided to patients at health facilities. The increase in the enrolment of exempt groups over NHIS contributors has financial implications for the implementation of NHIS (Kipo-Sunyehzi et al., 2020). The Government of Ghana has to transfer more money in the health insurance scheme to continue subsidizing for exempt groups.

ii. Innovation

The idea of adopting new processes or improving on existing service or product through innovation was suggested by five studies (Kodom et al., 2019; Agyepong et al., 2016; Kipo-Sunyehzi et al., 2020; Kumi-Kyereme et al., 2017; Fenny et al., 2016). To reduce waiting time at health facilities and NHIS registration centres, the NHIA should be innovative by improving community based structures or health centres at communities (Kodom et al., 2019; Fenny et al., 2016). Community-based clinics and the Community Health Planning Services (CHPS) compounds can be accredited and provided with human resources or skilled personnel and services to increase access to health in communities to reduce pressure on hospitals in urban centres (Kodom et al., 2019). Good roads should be provided for these communities to link them to referral health facilities (Fenny et al., 2016). Another way of reducing waiting time is to create more offices by the NHIA (Kumi-

Kyereme et al., 2017). Agyepong et al. (2016) suggests that innovative ideas for Ghana that can be learnt from other countries who have successfully attained universal health coverage. Japan was a country mentioned in the study as an example for attaining universal health coverage by learning and adopting strategies from Germany. Three countries Agyepong et al. (2016) study suggested Ghana learn from are South Korea, Thailand and Taiwan. These three countries were recommended not only because they have attained universal health coverage but they succeeded when they were part of low middle income countries (LMIC) just like Ghana is today. Four strategies were suggested to be learnt from these countries. These strategies are compulsory NHIS subscription and renewal, merge systems in identification cards, introducing door to door enrolment, and advocacy on economic growth.

Ghana can make NHIS subscription and renewal of NHIS compulsory by adopting family based registrations where formal sector employee's registrations will be done with their dependents at their workplaces and deductions will be made for the employee as a household head as well as the dependents. People in the non-formal sector will be mandated to register at their households. To achieve this, a negotiation for an increased percentage deduction to cover both the employee and their dependents will be employed. This strategy is aimed at increasing NHIS coverage of 30 to 40% and reduce the cost of time and travel to enroll in NHIS. Kipo-Sunyehzi et al. (2020) study supports this compulsion strategy by also suggesting that, taxes should be broadened by the Government of Ghana to generate enough revenue to cover all citizens including public and private workers in Ghana to ensure compulsory NHIS membership. The second strategy of merging systems in identification cards is for efficiency reasons (Kodom et al., 2019). Already existing identification cards can be merged and have all individual details which can be used to subscribe

and renew NHIS instead of creating a special NHIS identification card. This strategy can remove barriers such as time and travel cost to get an insurance card at NHIS registration centers. The door to door enrolment strategy is to get an idea of living standards and incomes for identifying the poor and registering them in NHIS. The last strategy of advocating for economic growth is because resources are made available to support UHC when there is economic growth in the country. Economic wealth increases the ability to implement NHIS policy successfully.

iii. Public Education

The National Health Insurance Authority should create awareness on the list of diseases, medications and treatments covered by the NHIS (Kodom et al., 2019) and negative perceptions concerning the quality of drugs administered to NHIS subscribers (Kumi-Kyereme et al., 2017). Barimah & Mensah (2013) also suggested that public education will deal with misconceptions of the scheme such as health facilities providing quality health care services and medications to uninsured individuals than the insured, provide right information on the value of health insurance, prevention of fraud and impersonation. This education can be done by using fliers at vantage points in health facilities. Communication tools that will be used in communities to create awareness on NHIS should be simple and easy to understand (Fenny et al., 2016).

iv. Assessments

Kodom et al. (2019) suggested a periodic bi-annual national customer satisfaction assessment to be organized by NHIA with the aim of getting results on patient's satisfaction level of healthcare service delivery. The results of the assessment will ensure service providers meet the changing

healthcare needs of individuals. Fenny et al. (2016) also suggested that, there should be a research organized by the NHIA to explore communication processes that is appropriate and suitable for educating individuals and expand coverage of the NHIS.

v. Partnerships

The NHIA needs to form partnerships with other governmental and non-governmental organizations such as social work department and Ministry of Gender and Social Protection, community leaders and civil society groups to enrol more of the poor and other vulnerable groups in the health insurance scheme (Kipo-Sunyehzi et al., 2020). The NHIA and the Ghana Health Service should organize regular workshops for health care workers on positive attitudes towards patients and NHIS clients (Kumi-Kyereme et al., 2017).

CHAPTER FIVE

DISCUSSION

5.0 Introduction

This chapter first provides a summary of the systematic review. It also provides a discussion of the results and compares the results with the extant literature review according to the research questions of the systematic review.

5.1 Summary

The systematic review is about the use of National Health Insurance Scheme in Ghana. The objective of the review is to identify the factors promoting and hindering the use of health insurance in Ghana. With the aid of an inclusion and exclusion criteria, a Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) process was used as guideline for obtaining included studies for the systematic review. Studies were identified by conducting search strategies of using internet search engines (google.com and google scholar), keywords or key terms, and screening for eligibility and inclusion. A screening process was performed on the titles, abstracts and full text review of the relevant studies identified. A quality assessment was conducted to obtain quality and trustworthy studies eligible for the review. Studies which were finally included in the systematic review comprised of six peer reviewed qualitative journal articles. Data was extracted from the included studies with the aid of a written data extraction form. The extracted data which was mainly quotations and text from included studies was analyzed and a thematic and narrative synthesis was used to present the results. The included studies provided six promoting factors and ten hindering factors of the use of health insurance in Ghana. Five measures to improve the use of the National Health Insurance Scheme were also suggested by the included studies.

5.2 Factors Promoting NHIS Subscription or Enrolment

The results revealed that the NHIS policy classifying children and teenagers (under 18 years), pregnant women, SSNIT pensioners, the poor, and the aged (70 years and above) as vulnerable groups were exempted from paying annual premiums to renew their health insurance once they subscribe to the scheme (Agyepong et al., 2016; Kipo-Sunyehzi et al., 2020; Barimah & Mensah, 2013; Kumi-Kyereme et al., 2017). Out-of-pocket (OOP) system in health delivery which was introduced by the Government of Ghana in 1983, was implemented for citizens to pay for the whole cost of medical treatment and services (Fuseini, 2012) which discouraged vulnerable groups especially the poor from enrolling in the health insurance scheme because they couldn't afford the health expenses. The exemption policy which covers all the cost of their medical treatment has led to the rise in the number of vulnerable groups enrolling in NHIS. This policy causing more of these groups to enrol in NHIS is an indicator of achieving UHC because of its characteristic of being a removing financial barrier (Hogan et al., 2018), low-income policy (Chan, 2016) and considering who is covered (Lagomarsino et al., 2012).

Apart from these reasons increasing the enrolment of vulnerable groups through the exemption policy, the policy has proved that, the usage of NHIS can be promoted when it aligns with the principles of NHIS. Three principles of NHIS that is equity, cross-subsidization and solidarity (MOH, 2004) were incorporated in this exemption policy. Vulnerable groups enrol more in NHIS due to the realization that, despite their conditions, they have equal opportunity to benefit from NHIS just like other Ghanaian citizens which shows equity. The situation where the rich, healthy and employed pay premiums to cross-subsidize vulnerable groups is a sign of mutual support and expressing empathy for vulnerable groups. This situation falls under the principle of both cross-

subsidization and solidarity. The exemption policy promoting the enrolment of NHIS is considered as a strength of NHIS because of the scheme being inclusive sensitive by ensuring fairness and equity to vulnerable groups of people in Ghana (NHIS, 2013).

Uncertainties related to health which includes unforeseen illness and unknown financial capability at the time of illness (Kumi-Kyereme et al., 2017) creates anxiety (Berekson, 1972) and fear (Brahmana et al., 2018) among individuals. This compels an individual to seek for health security by enrolling in NHIS because of the value an individual attach to good health (Porter, 2010), an individual's perception of the risk of falling ill and the perception of usefulness where medication cost is covered (Liebenberg et al., 2012a). Health security being a factor to promote NHIS subscription comes in the form of availability of health care and financial protection where there are effective pharmaceuticals (Seiter, 2011) for treatment and an individual not paying any amount or paying less at health facilities (Dalinjong & Laar, 2012). The right knowledge acquired by an individual on NHIS promoting enrolment (Agyepong et al., 2016) corroborates with Yirbour (2011) study concerning consumer information. This information is needed to educate the public on NHIS processes such as the payment of premiums. The non-partisan nature of the scheme which was the right information in Agyepong et al. (2016) study, after political debates of the scheme being partisan or not led to an increase in the number of enrolees.

5.3 Factors Promoting NHIS Renewal

Renewal of NHIS can only be done by paying an annual renewal premium. The promotion of NHIS renewal depends on the amount of renewal premium and the capability of an individual to pay that amount. Most people who renew their insurance claim it is affordable (Kumi-Kyereme et al., 2017; Kipo-Sunyehzi et al., 2020) and this depends on the income level of the individual (Adu, 2019). After NHIS subscription, the level of healthcare services (Barimah & Mensah, 2013) the subscriber benefits and the diseases covered by NHIS (Agyepong et al., 2016; Kipo-Sunyehzi et al., 2020; Kumi-Kyereme et al., 2017) promote the renewal of the insurance by NHIS subscribers. Renewal is promoted especially for NHIS subscribers that utilize health care often (Duku et al., 2016) due to chronic diseases they suffer from (Atinga et al., 2015). As a result, recommendations are made (Kumi-Kyereme et al., 2017) by the subscribers who have benefited from NHIS to their social networks to renew their NHIS as well. These social networks can be groups, families and friends and are easily convinced to renew their cards because of their togetherness in performing activities and trust they have among themselves (Fenenga et al., 2014). The role of NHIS staff (Agyepong et al., 2016) undertaking the strategy of going to villages to collect the cards of poor subscribers for renewal is a way of promoting renewal whilst ensuring the principle of equity, cross-subsidization and solidarity (MOH, 2004).

5.4 Factors Causing NHIS Non-subscription or Non-enrolment

Young people between the ages of 18 and mid-40s in the informal sector feel there is no need to enroll in NHIS (Agyepong et al., 2016) because they feel strong and rarely fall sick after assessing themselves (Fenny et al., 2016). This finding is consistent with Kusi et al. (2015) study where individuals did not enroll in insurance because they do not fall sick often. Therefore, NHIS subscription is seen as a waste of money and time because the insurance will never be used. This assertion by young group of people indicates there was no understanding and support for the principle of cross-subsidization and solidarity of NHIS. The principle of cross-subsidization ensures people pay for insurance despite their risk of falling sick to subsidize the sick. Solidarity also seeks mutuality where insurance is paid for a neighbor with a communicable disease to prevent incidences of this disease transferred to a young person claiming to be always healthy. The cost of enrolment premiums was considered by some Ghanaians as high and expensive leading their non-enrolment (Agyepong et al., 2016; Kumi-Kyereme et al., 2017). This is because they were not financially capable (Lee et al., 2010) and could not afford the premium for NHIS registration (Dalinjong & Laar, 2012).

The negative experiences of NHIS subscribers at health facilities produces a negative word of mouth as such bad perceptions are communicated with others close to them. The way people convince their social networks to enroll and renew their health insurance (Kumi-Kyereme et al., 2017), in the same way, NHIS subscribers can discourage others from enrolling in NHIS after having bad experiences. The experiences of poor quality health care for insured people (Fenny et al., 2016; Agyepong et al., 2016; Kumi-Kyereme et al., 2017; Barimah & Mensah, 2013) and delays in processing and issuing of NHIS identity cards are bad perceptions leading to negative

word of mouth. NHIS subscribers claim that the drugs given to them are of low quality than the drugs given to people who are not insured or ready to pay. This finding is consistent with the results of Dalinjong & Laar (2012) study where Ghanaians perceived the low quality of drugs given to insured people than those who were ready to pay-out of-pocket. One of the reasons delays were experienced was due to inadequate funding of NHIS (Agyepong et al., 2016). This problem of low finance is also being attributed to weak financing policies by Amu & Darteh (2017) study which is a threat to the sustainability of the national health insurance scheme.

5.5 Factors Causing NHIS Non-renewal

Service quality is what most NHIS subscribers seek to experience at health facilities and NHIS registration centres. There are three dimensions of service quality in the health sector that is (i) accessibility, (ii) amenities, and (iii) interpersonal relations, support, and cultural appropriateness (Baker et al., 2008). The reason why most Ghanaians do not renew their health insurance after subscription has to do with poor delivery of these service quality dimensions. Long waiting time and delays are factors under the accessibility dimension of service quality that prevents people from renewing their insurance. Ghanaians wait for long hours by joining queues to renew their health insurance at NHIS registration centres (Agyepong et al., 2016), check the validity of their insurance when they get to the health facilities, and meeting the doctor for diagnosis (Kodom et al., 2019, Kumi-Kyereme et al., 2017). The issuance of their NHIS identity cards delays as it can take days to get the cards (Fenny et al., 2016). The uninsured do not experience long waiting time and delays (Jehu-Appiah et al., 2011; Adu, 2019). When it comes to the dimension of amenities, some health facilities lack basic facilities for treatment which makes people prefer to attend private hospitals without health insurance. Apart from lack of basic facilities, most medications and

services are not covered by the NHIS as it was communicated to be covered (Agyepong et al., 2016; Kodom et al., 2019). The NHIS covered cheap drugs and consultation which was not the expectation of NHIS subscribers. These benefits of NHIS are considered to be limited (Boateng & Awunyor-Vitor, 2013) and a loss of money (Adu, 2019).

The dimension of interpersonal relations, support and of service quality, cultural appropriateness of service quality that hinders NHIS renewal has to do with the services of healthcare providers especially nurses portray to NHIS subscribers (Atinga et al., 2011). Bad attitudes are portrayed to NHIS subscribers by shouting at them (Agyepong et al., 2016) and giving attention to their mobile phones (Kodom et al., 2019) instead of their patients. Health care providers also do not respect the culture of NHIS subscribers which leads to discrimination. Muslim women with their hijab are insulted for giving birth a lot which is part of their culture to have more offspring. Others are also treated badly for their inability to speak a preferred language at health facilities (Agyepong et al., 2016). Health insurance officials and private pharmacists have also been noted for poor services as they extort money illegally form NHIS subscribers for rendering services which are free. Their corrupt behaviours and lies prevents people from renewing their insurance because they cannot afford the money and high prices of medications of these NHIS officials and pharmacists (Agyepong et al., 2016; Barimah & Mensah, 2013). The poor service quality is against NHIS principle of quality care (MOH, 2004). NHIS subscribers have a part to play in the non-renewal of their insurance. Most of them do not keep in mind the expiry dates of their insurance until they fall ill (Agyepong et al., 2016). Awudu (2016) supports this finding by stating that, the knowledge of NHIS subscriber's insurance card's expiry date determines the renewal of insurance of the subscriber.

5.6 Measures to Improve NHIS

The availability of money is very important in the implementation of NHIS in Ghana. The finances of NHIS is low because of weak financing policies (Amu & Darteh, 2017), low numbers of NHIS enrollees (Imurana et al., 2014), illegal activities of NHIS members and providers (NHIS, 2013) and abuse of health services by NHIS subscribers (Dalinjong & Laar, 2012). Kodom et al. (2019) study mentions the fact that, consistent finances from the Government of Ghana are needed to pay arrears and claims of providers and improve service quality at health facilities. The number of NHIS exempt groups in Ghana make up 69% of the total number of NHIS enrollees (Fiestas Navarrete et al., 2019). The percentage of diseases the NHIS covers is 95% for all patients (NHIS, 2018). The high number of exempt groups and diseases covered by the NHIS requires a massive financial support for its implementation and subsidization (Kipo-Sunyehzi et al., 2020). Financial support is also needed to fulfil three principles of NHIS that is reinsurance, sustainability and risk equalization (MOH, 2004). Reinsurance is needed to be fulfilled as it helps the Government to prepare for under-funding resulting from unforeseen events, sustainability to develop human resources, systems and policies to manage areas of risk and fraud control and risk-equalization to allocate financial resources to geographic areas with high poverty and disease outbreaks.

Innovation (Kodom et al., 2019; Agyepong et al., 2016; Kipo-Sunyehzi et al., 2020; Kumi-Kyereme et al., 2017; Fenny et al., 2016) improves service quality and ensures the principle of efficiency (MOH, 2004) which is needed in the collection of premiums especially from the informal sector and the fast administration of claims for reimbursement of service providers. The

governance and administrative framework that have been set out by the Government of Ghana responsible in planning and implementing health insurance services (schieber et al., 2012) can improve service quality and adopt some efficient methods such as improving community based structures or health centers at communities (Kodom et al., 2019; Fenny et al., 2016) by providing accreditation, skilled personnel, good roads to referral health facilities and creating more offices to reduce waiting time and delays. The strategy of making subscription and renewal of NHIS compulsory by adopting family-based registrations will increase the finances of the NHIS for improved service quality. Merging individual details in an already existing identification card such as the Ghana national identity card can prevent the forming of long queues and cost of money and travel to get a new identity card for NHIS.

Research in the form of conducting a periodic bi-annual national customer assessment to identify patient's satisfaction level of healthcare service delivery (Kodom et al., 2019) is important to improve the use of NHIS and inform public education strategies which is used to create awareness on the insurance scheme. Quality care as a principle of NHIS (MOH, 2004) will be ensured through this research and education. Partnerships that are suggested to be formed with other governmental organization and community leaders (Kipo-Sunyehzi et al., 2020) to enroll more of the poor and other vulnerable groups is a way of complying with the principle of partnership in NHIS (MOH, 2004). Partnering with communities and their leaders will involve them in the planning and decision making of improving NHIS services. This strategy will create a community or subscriber sense of ownership (MOH, 2004).

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

This chapter concludes the systematic review. It first provides the strength and limitation of the review. Recommendations to add up to the suggested measures to improve NHIS usage was also provided.

6.1 Strengths of the Review

The strengths of the review were the usefulness, relevance, reliability, validity, and quality of review which were found in the clarity of the purpose, methods and included studies of the review. The objective and research questions were clearly stated in the systematic review which guided the systematic review to gain useful and relevant insights. The inclusion and exclusion criteria were also clearly stated in the systematic review which set boundaries to produce reliable results. The characteristics of individual included studies and a clear format of assessing quality of individual studies was provided. This showed the validity of the studies used in the review. Out of the six included studies identified, five of them was rated as high in terms of quality. The included studies used the perceptions and experiences of members of NHIS, non-members of NHIS, stakeholders and health officials to present the results which made it possible to draw useful and reasonable judgements about the conclusions of the studies. The findings of the included studies were up to date as the publication years range from 2013 to 2020. The updated studies provided the latest changing health needs and perception of Ghanaians towards NHIS. The use of peer-reviewed journal articles in the included studies makes the findings reliable as it is checked by academics and experts. In all, every phase of the systematic review was transparent in the sense

that, the procedure was clearly shown and reasons for every decision made to compile every evidence was indicated.

6.2 Limitations of the Review

The limitation of the review is that the identification of included studies was done by me alone. In systematic reviews, it is deemed appropriate to work as a team where there is an engagement of 2 or more authors or reviewers to search and identify studies, screen the studies, and select the final included studies for the systematic review. Another limitation is that, grey literature which includes media and organizational reports, dissertations and newspapers which is important in systematic reviews to increase the comprehensiveness of available evidence was excluded in this review. The search for identifying relevant studies was limited to just 2 databases that is google.com and google scholar which may have excluded relevant studies from renowned databases. The systematic review was limited to only qualitative research methods in included studies and excluded quantitative and mixed method research which may have maximized the findings. Only one included study that is Barimah & Mensah (2013) was moderate in terms of quality assessment which affects the relevance and trustworthiness of the evidence in that study. The included studies did not suggest measures to solve and improve all the reported hindering factors and promoting factors of NHIS usage. For instance, the hindering factors of illegalities and societal norms were not addressed.

6.3 Conclusion

National health insurance in Ghana is used by subscribing or enrolling to become a member and renewing the insurance yearly. Factors that hindered the use of the health insurance outnumbers factors that promotes the use of health insurance in Ghana. This gap is a threat to the sustainability of the National Health Insurance Scheme. Factors promoting the use of National Health Insurance Scheme in Ghana includes factors promoting NHIS subscription or enrolment and factors promoting renewal of NHIS. These promoting factors in NHIS subscription or enrolment are exemption policy, health security and right knowledge on NHIS and factors promoting renewal of NHIS are affordability of annual renewal premium, healthcare benefits and the role of NHIS staff. The alignment of the activities of the public, NHIS staff, and other stakeholders with the principles of NHIS promotes the use of NHIS and vice versa. Factors hindering the use of National Health Insurance Scheme in Ghana includes factors responsible for NHIS non-subscription or non-enrolment and factors responsible for non-renewal of NHIS. Factors responsible for NHIS non-subscription or non-enrolment are individual health status, negative word of mouth, societal norms, and cost and factors responsible for non-renewal of NHIS are poor responsiveness, illegalities, unmet expectations, unaffordability, discrimination, and forgetfulness. Measures suggested to improve the use of National Health Insurance Scheme in Ghana are financial support, innovation, public education, assessments, and partnerships. The Government of Ghana, the NHIA, and the Ghana Health Service are suggested to adopt and implement the measures to improve the use of National Health Insurance Scheme in Ghana

6.4 Recommendations

The following are recommendations are made in addition to the measures suggested in the included studies to promote and improve the use of National Health Insurance in Ghana;

1. To solve the problem of illegalities among NHIS health officials, the public, providers and credentialed private pharmacies, a whistle blowing policy should be formulated by the Government of Ghana and NHIA to ensure openness, transparency and detect wrongdoings. The whistleblowing policy should incorporate awards for those who report wrongdoings. Leadership of health facilities and pharmacies should be made to agree and sign to the protection of whistle blowers. This is because, whistle blowers can suffer consequences of dismissal, denial of employee benefits and subscriber injury. Health facilities and pharmacies that violate the whistle blower's protection laws and refuse to protect them should be punished through suspensions, fines and imprisonment. NHIS subscribers and employees will be empowered and motivated to speak up without fear when they sense wrong in NHIS activities. Technologies such as Closed-Circuit Television (CCTV) cameras should by adopted by NHIA to monitor the activities of healthcare providers and officials.

2. The status of being poor by an individual can be changed as rich or wealthy but the individual might still be enjoying the benefits from the exemption policy as being poor. To track and monitor the status of individuals in Ghana, an employment record should be implemented by the Government of Ghana and merged in a single identity card. The change of one's employment status should be updated yearly and indicated in the biometric card to check whether individuals are eligible to benefit from the exemption policy.

3. The problem of societal norms needs to be solved through partnership with NHIS, the Government, community leaders and members. They should be educated on norms in the society that negatively affects the good health status of individuals.

4. There should be more awareness creation on the recent introduction of mobile phone NHIS renewal through community durbars, community information centres, the media and other communication channels. The promotion of the mobile phone renewal will solve the problem of delays in issuing NHIS cards and lower the burden of NHIA to cut down queues at registration offices and increase revenue for the NHIS.

REFERENCES

Ackerly, B., & True, J. (2010). *Doing feminist research in political and social science.* New York, NY: Palgrave Macmillan.

Adu, K. O. (2019). National health insurance scheme renewal in Ghana: Does waiting time at health insurance registration office matter? MPRA Paper No. 91961.

Agyepong, I. A., Abankwah, D. N. Y., Abroso, A., Chun, C., Dodoo, J. N. O., Lee, S., ... & Asenso-Boadi, F. (2016). The "Universal" in UHC and Ghana's National Health Insurance Scheme: policy and implementation challenges and dilemmas of a lower middle income country. *BMC Health Services Research*, *16*(1), 1-14.

Alhassan, R. K., Nketiah-Amponsah, E., & Arhinful, D. K. (2016). A review of the National Health Insurance Scheme in Ghana: what are the sustainability threats and prospects?. *PloS one*, *11*(11), e0165151.

Alolo, A. A. R. A., Abdu, J. I., & Kasimu, A. (2014). Sustainable Strategies to Membership Enrolment and Renewal of National Health Insurance Scheme Clients in East Gonja. *ADRRI Journal of Arts and Social Sciences*, *4*(4).

Amu, H., & Dickson, K. S. (2016). Health insurance subscription among women in reproductive age in Ghana: do socio-demographics matter?. *Health economics review*, *6*(1), 1-8.

Ankrah, D., Hallas, J., Odei, J., Asenso-Boadi, F., Dsane-Selby, L., & Donneyong, M. (2019). A review of the Ghana National Health Insurance Scheme claims database: possibilities and limits for drug utilization research. *Basic & clinical pharmacology & toxicology*, *124*(1), 18-27.

Apoya, p., & Marriott, A. (2011). Achieving a Shared Goal; Free Universal Health Care in Ghana. Oxfam International.

Aromataris, E., & Riitano, D. (2014). Systematic reviews: constructing a search strategy and searching for evidence. *AJN The American Journal of Nursing*, *114*(5), 49-56.

Arpoh-Baah, B. (2011). *Assessing financial sustainability of national health insurance scheme (NHIS) in Ghana case study: Mpohor Wassa East mutual health insurance*

scheme (masters' dissertation). Kwame Nkrumah University of Science and Technology, Ghana.

Asenso-Boadi, F. (2009, November). The interplay between district wide health insurance schemes and National Health Insurance Policies in Ghana. In *5th International Microinsurance Conference, Dakar, Senegal*.

Asia Pacific Economic Cooperative (APEC). (2013) Statement by Third APEC High level Meeting on Health and the Economy. Available at http://www.apec.org/Meeting-Papers/ Ministerial-Statements/Health/2013_health_hlm.aspx

Atim, C. B., Diop, F. P., Etté, J., Evrard, D., Marcaden, P., & Massiot, N. (1998). The contribution of mutual health organizations to financing, delivery, and access in health care in west and central Africa: summaries of synthesis and case studies in six countries. *PHR Order No. TE*, *19*.

Atinga, R. A., Abekah-Nkrumah, G., & Domfeh, K. A. (2011). Managing healthcare quality in Ghana: a necessity of patient satisfaction. *International Journal of Health Care Quality Assurance*, 24 (7), pp. 548-563

Atinga, R. A., Abiiro, G. A., & Kuganab-Lem, R. B. (2015). Factors influencing the decision to drop out of health insurance enrolment among urban slum dwellers in Ghana. *Tropical Medicine and International Health*, *20* (3), 312–321.

Awudu, S. (2016). *National health insurance scheme: predictors of card renewal among subscribers in the East Gonja District*. Master's thesis, University of Ghana.

Bakar, C., Akgün, H. S., & Al Assaf, A. F. (2008). The role of expectations in patient assessments of hospital care: an example from a university hospital network, Turkey. *International journal of health care quality assurance*, 21(4), pp. 343-55.

Barimah, K. B., & Mensah, J. (2013). Ghana's National Health Insurance Scheme: insights from members, administrators and health care providers. *Journal of health care for the poor and underserved*, *24*(3), 1378-1390.

Barredo, L., Agyepong, I., Liu, G., & Reddy, S. (2014). Goal 3 Ensure healthy lives and promote well-being for all at all ages. The Magazine of the United Nations. UN Chronicle. 4:9-10. https://unchronicle.un.org/article/goal-3-sdgsand- healthier-2030.

Baxter, J., & Eyles, J. (1997). Evaluating qualitative research in social geography: Establishing 'rigour' in interview analysis. Transactions of the Institute of British Geographers, 22(4), 505-525. doi: 10.1111/j.0020-2754.1997.00505.x

Berekson, L. L. (1972). Birth order, anxiety, affiliation and the purchase of life insurance. *Journal of Risk and Insurance*, *39*(1), 93-108.

Bhat, R., & Jain, N. (2007). A study of factors affecting the renewal of health insurance policy. *Indian Institute of Management Ahmedabad*, India, W.P. No.2007-01-02.

Bitsch, V. (2005). Qualitative research: A grounded theory example and evaluation criteria. Journal of Agribusiness, 23(1), 75-91.

Blanchet, N. J., Fink, G., & Osei-Akoto, I. (2012). The effect of Ghana's National Health Insurance Scheme on health care utilisation. *Ghana medical journal*, *46*(2), 76-84.

Boateng, D., & Awunyor-Vitor, D. (2013). Health insurance in Ghana: evaluation of policy holders' perceptions and factors influencing policy renewal in the Volta region. *International journal for equity in health*, *12*(1), 1-10.

Brahmana, R., Brahmana, R. K., & Memarista, G. (2018). Planned behaviour in purchasing health Insurance. *The South East Asian Journal of Management*.

Chan, M. (2016). Making fair choices on the path to universal health coverage. *Health Systems & Reform*, *2*(1), 5-7.

Clark, A. M. (2016). Why qualitative research needs more and better systematic review. *International Journal of Qualitative Studies, 15*(1), pp.1-3.

Cohen, D. J., & Crabtree, B. F. (2008). Evaluative criteria for qualitative research in health care: controversies and recommendations. *The Annals of Family Medicine*, *6*(4), 331-339.

Cohen, L., Manion, L., & Morrison, K. (2011). Research methods in education (7 Ed.). New York, NY: Routledge.

Dalaba, M. A., Akweongo, P., Aborigo, R., Awine, T., Azongo, D. K., Asaana, P., ... & Oduro, A. (2014). Does the national health insurance scheme in Ghana reduce household cost of treating malaria in the Kassena-Nankana districts?. *Global health action*, *7*(1), 23848.

Dalinjong, P. A., & Laar, A. S. (2012). The national health insurance scheme: perceptions and experiences of health care providers and clients in two districts of Ghana. *Health economics review*, *2*(1), 1-13.

Darkpani, P. (2011). Sustainability of health insurance in ghana: a case study of Sekyere East District Mutual Health Insurance Scheme. (SEDMHIS). (masters' dissertation). Kwame Nkrumah University of Science and Technology, Ghana.

Dickson, R., Cherry, M. G., & Boland, A. (2014). Carrying out a systematic review as a master's thesis. *Doing a systematic review: A student's guide*, 1-16.

Dixon, J., Tenkorang, E. Y., & Luginaah, I. (2011). Ghana's National Health Insurance Scheme: helping the poor or leaving them behind?. *Environment and Planning C: Government and policy*, *29*(6), 1102-1115.

Dixon-Woods, M., Booth, A., & Sutton, A. J. (2007). Synthesizing qualitative research: a review of published reports. *Qualitative Research*, *7*(3), 375-422.

Dizioli, A., & Pinheiro, R. (2016). Health insurance as a productive factor. *Labour Economics*, *40*, 1-24.

Duku, S. K. O., Asenso-Boadi, F., Nketiah-Amponsah, E., & Arhinful, D. K. (2016). Utilisation of healthcare services and renewal of health insurance membership: Evidence of adverse selection in Ghana. *Health Economics, Review*, *43*(6), 1 – 12.

Fenenga, C. J., Boahene, K., Arhinful, D., de Wit, T. R., & Hutter, I. (2014). Do prevailing theories sufficiently explain perceptions and health-seeking behavior of Ghanaians?. *The International journal of health planning and management*, *29*(1), 26-42.

Fenny, A. P., Kusi, A., Arhinful, D. K., & Asante, F. A. (2016). Factors contributing to low uptake and renewal of health insurance: a qualitative study in Ghana. *Global health research and policy*, *1*(1), 1-10.

Fiestas Navarrete, L., Ghislandi, S., Stuckler, D., & Tediosi, F. (2019). Inequalities in the benefits of national health insurance on financial protection from out-of-pocket payments and

access to health services: cross-sectional evidence from Ghana. *Health policy and planning*, *34*(9), 694-705.

Fuseini, A. (2012). *Time series analysis on membership enrolment of national health insurance scheme. a case study of Savelugu/Nanton District mutual health insurance scheme in Northern Region* (masters' dissertation). Kwame Nkrumah University of Science and Technology, Ghana.

Gajate-Garrido, G., & Owusua, R. (2013). The national health insurance scheme in Ghana: Implementation challenges and proposed solutions. Development strategy and governance division. IFPRI discussion paper 01309.

Ghanem, S. A, Bayer, S., Stephens, P., & Nudo, E. (2019). Actuarial Modelling Exercise: Final Report (NHIS, Ghana).

Government of Ghana (GoG). (2012). National Health Insurance Act: Act 852. Accra.

Grudniewicz, A., Moher, D., Cobey, K. D., Bryson, G. L., Cukier, S., Allen, K., ... & Lalu, M. M. (2019). Predatory journals: no definition, no defence.

Hammerstrom, K., Wade, A., Jorgensen, A-M. K. (2010). Searching for studies: a guide to information retrieval for Campbell Systematic Reviews. *Campbell Systematic Reviews, Supplement 1*, 1-75. doi: 10.4073/csrs.2010.1

Hannes, K. (2011). Chapter 4: Critical appraisal of qualitative research. In: Noyes J, Booth A, Hannes K, Harden A, Harris J, Lewin S, Lockwood C (editors), *Supplementary Guidance for Inclusion of Qualitative Research in Cochrane Systematic Reviews of Interventions.* Version 1 (updated August 2011). Cochrane Collaboration Qualitative Methods Group, 2011. Available from URL http://cqrmg.cochrane.org/supplemental-handbook-guidance

Harris, J. D., Quatman, C. E., Manring, M. M., Siston, R. A., & Flanigan, D. C. (2014). How to write a systematic review. *The American journal of sports medicine*, *42*(11), 2761-2768.

Hatt, L., Thornton, R., Magnoni, B., & Islam, M. (2009). Extending social insurance to informal sector workers in Nicaragua via microfinance institutions: Results from a randomized evaluation. *USAID PSP-One and Global Development Network*.

Hill, A., & Spittlehouse, C. (2003). What is critical appraisal? *Evidence-Based Medicine, 3* (2), pp. 1-8.

Hogan, D. R., Stevens, G. A., Hosseinpoor, A. R., & Boerma, T. (2018). Monitoring universal health coverage within the Sustainable Development Goals: development and baseline data for an index of essential health services. *The Lancet Global Health*, *6*(2), 152-168.

Holloway, I., & Wheeler, S. (2002). Qualitative research in nursing (2 ed.). Malden, MA: Blackwell.

Imurana, B., Kilu, R. H., & Kofi, A. B. (2014). The politics of public policy and problems of implementation in Africa: an appraisal of Ghana's National Health Insurance Scheme in Ga East District. *International Journal of Humanities and Social Science*, *4*(4), 196-207.

Innovative Biopharmaceutical Industry (IBI). (2014). Perspectives on Universal Health Coverage. Proposed Public Policy Principles.

International Labour Organization (ILO). (2008). Social health protection: An ILO strategy towards universal access to health care. Geneva.. http://www.ilo.org/ public/english/protection/secsoc/downloads/policy/policy1e.pdf

Jehu-Appiah, C., Aryeetey, G., Spaan, E., De Hoop, T., Agyepong, I., & Baltussen, R. (2011). Equity aspects of the national health insurance scheme in Ghana: Who is enrolling, who is not and why? *Social Science & Medicine, 72*, 157-165.

Kipo-Sunyehzi, D. D., Ayanore, M. A., Dzidzonu, D. K., & AyalsumaYakubu, Y. (2020). Ghana's Journey towards universal health coverage: the role of the national health insurance scheme. *European Journal of Investigation in Health, Psychology and Education*, *10*(1), 94-109.

Kodom, M., Owusu, A. Y., & Kodom, P. N. B. (2019). Quality healthcare service assessment under Ghana's national health insurance scheme. *Journal of Asian and African Studies*, *54*(4), 569-587.

Kotoh, A. M., Aryeetey, G. C., & Van Der Geest, S. (2018). Factors that influence enrolment and retention in Ghana'National Health Insurance Scheme. *International journal of health policy and management*, *7*(5), 443.

Kumi-Kyereme, A., Amu, H., & Darteh, E. K. M. (2017). Barriers and motivations for health insurance subscription in Cape Coast, Ghana: a qualitative study. *Archives of Public Health*, *75*(1), 1-10.

Kusi, A., Enemark, U., Hansen, K. S., & Asante, F. A. (2015). Refusal to enrol in Ghana's National Health Insurance Scheme: is affordability the problem?. *International journal for equity in health*, *14*(1), 1-14.

Lagomarsino, G., Garabrant, A., Adyas, A., Muga, R., & Otoo, N. (2012). Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia. *The Lancet*, *380*(9845), 933-943.

Liebenberg, A. P., Carson, J. M., & Dumm, R. E. (2012a). A Dynamic Analysis of the Demand for Life Insurance. *Journal of Risk and Insurance*, *79*(3), 619-644.

Macnee, L. C., & McCabe, S. (2008). Understanding nursing research: Using research evidence-based practice. Philadelphia, PA: Lippincott Williams & Wilkins.

Mills, A., Ataguba, J. E., Akazili, J., Borghi, J., Garshong, B., Makawia, S., ... & McIntyre, D. (2012). Equity in financing and use of health care in Ghana, South Africa, and Tanzania: implications for paths to universal coverage. *The Lancet*, *380*(9837), 126-133.

Ministry of Health (MoH). (2004). National Health Insurance Policy Framework for Ghana (Revised Version). Accra: Ministry of Health; 2004. http://www. ghanahealthservice.org/downloads/NHI_policy%20framework.pdf

Ministry of Health (MOH). (2019). Ghana Health Financing Forum 2019: Forum Report. Accra.

National Development Planning Commission (NDPC), Ghana. (2008). "Citizens" Assessment of National Health Insurance Scheme." Available at: http://www.ndpc.gov.gh/GPRS/Citizens'%20Assessment%20of%20NHIS%202008

National Health Insurance Authority (NHIA). (2011). Annual Report. Status of implementation of the NHIS. http://www.nhis.gov.gh/ files/annualreport2011.

National Health Insurance Authority (NHIA). (2012). Annual report. Retrieved from Accra.

National-Health-Insurance-Authority (NHIA). (2013). *Annual Report.* Retrieved from Accra

National Health Insurance Scheme (NHIA). (2013). *Towards Universal Health Coverage: Increasing Enrolment whilst Ensuring Sustainability*. National Health Insurance Scheme 10TH Anniversary International Conference Report. International Conference Centre. Accra.

National Health Insurance Scheme (NHIA). (2020). A guide to registering and accessing NHIS benefits. NHIS membership handbook.

National Health Insurance Scheme (NHIS). (2018). Benefits Package. Retrieved from http://www.nhis.gov.gh/benefits.aspx.

Nsiah-Boateng, E. (2014). Eight Years of National Health Insurance in Ghana: evaluation of the health financing sub-functions. *Value in Health*, *17*(3), A144-A145.

Nsiah-Boateng, E., Musah, M., Jung, H., Danso Akuamoah, C., Yang, D., Kim, Y., ... & Andoh-Adjei, F. X. (2020). The impact of community outreach intervention on national health insurance enrolment, knowledge and health services utilisation: evidence from two districts in Ghana. *Journal of Global Health Science*, *2*(1).

Nsiah-Boateng, E., Nonvignon, J., Aryeetey, G. C., Salari, P., Tediosi, F., Akweongo, P., & Aikins, M. (2019). Sociodemographic determinants of health insurance enrolment and dropout in urban district of Ghana: a cross-sectional study. *Health economics review*, *9*(1), 1-9.

Oppong, J. R. (2018). Structural adjustment and the health care system. In *IMF and World Bank sponsored structural Adjustment Programs in Africa* (pp. 357-370). Routledge.

Organization for Economic Co-operation and Development (OECD). (2013). Different paths towards sustainable universal coverage: Statement by Deputy Secretary- General Yves Leterme. Available at http://www.oecd.org/centrodemexico/medios/ differentpathstowardssustainableuniversalcoverage.htm.

Osayande, O., & Ukpebor, C. O. (2012). Grey literature acquisition and management: Challenges in academic libraries in Africa. Library Philosophy and Practice (e-journal). 700. https://digitalcommons.unl.edu/libphilprac/700.

Patino, C. M., & Ferreira, J. C. (2018). Inclusion and exclusion criteria in research studies: definitions and why they matter. *Jornal Brasileiro de Pneumologia*, *44*, 84-84.

Patton, M. Q. (2002). Qualitative research & evaluation methods (3rd ed.). Sage.

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., ... & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews. *A product from the ESRC methods programme Version*, *1*, b92.

Porter, M. E. (2010). What is value in health care? *The New England Journal of Medicine,* 363 (26), 2477-2481.

Roberts, M. J. (2011). *Pharmaceutical reform: a guide to improving performance and equity*. World Bank Publications.

Sandelowski, M., & Barroso, J. (2007). *Handbook for synthesizing qualitative research*. Springer publishing company.

Schieber, G., Cashin, C., Saleh, K., & Lavado, R. (2012). *Health Financing in Ghana.* Washington, DC: World Bank. doi:10.1596/978-0-8213-9566-0.

Schmidt, L., Olorisade, B. K., McGuinness, L. A., Thomas, J., & Higgins, J. P. (2021). Data extraction methods for systematic review (semi) automation: A living systematic review [version 1; peer review: awaiting peer review]. *F1000Research*, *10*, 401-401.

Seiter, A. (2011). *Country Status Report: Pharmaceutical Background Paper.* Ministry of Health and World Bank, Accra.

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. Journal of Advanced Nursing, 48(4), 388-396. doi: 10.1111/j.1365-2648.2004.03207.x.

Uman, L. S. (2011). Systematic reviews and meta-analyses. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *20*(1), 57.

United Nations (UN). (2015). General Assembly Seventieth Session. Agenda item 15 and 116. A/RES/70/1. Resolution adopted by the General Assembly on 25th September 2015. Transforming our world: the 2030 Agenda for sustainable development. Page 7. http://www.ipu.org/splz-e/unga16/2030-e.pd.

United Nations Economic and Social Council (UNESC). (2000). The right to the highest attainable standard of health. 22nd session of the Committee on Economic, Social and Cultural Rights. General Comment 14. Geneva, April-May. http://www.unhchr.ch/tbs/doc.nsf/(symbol)/E.C.12.2000.4.En.

Vallekoop, H., & Odame, E. (2017). An economic evaluation considering the benefits packages of the national health insurance scheme in Ghana. Ministry of Health.

Victor, L. (2008). Systematic reviewing. *Social research update*, *54*(1), 1-4.

World Health Organization (WHO). (2004). World report on Health Systems: improving performance, Geneva.

World Health Organization (WHO). (2012). What is universal health coverage? 2012 October. Retrieved from http://www.who.int/features/ qa/universal_health_coverage/en/index.html

World Health Organization (WHO).(2010). World Health Report: Health System Financing, the Road to Universal Coverage.

World Health Organization. (2017). *Together on the road to universal health coverage: A call to action* (No. WHO/HIS/HGF/17.1). World Health Organization.

Xu, K., Evans, D. B., Kawabata, K., Zeramdini, R., Klavus, J., & Murray, C. J. (2003). Household catastrophic health expenditure: a multicountry analysis. *The lancet*, *362*(9378), 111-117.

Yirbour, E. (2011). *National Health Insurance and Quality Health Care in the Lawra District* (Masters dissertation). University of Development Studies, Ghana.

Zurynski, Y. (2014). Writing a systematic literature review: Resources for students and trainees. *Pobrano z: http://www. apsu. org. au/assets/Resources/Writing-a-Systematic-Literature-Review. Pdf.*

APPENDIX I

DATA EXTRACTION

DATA TO BE EXTRACTED	NOTES
Title of study	
Author (s)	
Year of publication	
Aim of study	
Study settings	
Sample size and sampling method	
Type of NHIS usage	
Quotations and text for Enrolment/Subscription	
Quotations and text for Non-enrolment/Non-subscription	
Quotations and text for Renewal	
Quotations and text for Non-Renewal	
Measures suggested	

APPENDIX II

QUALITY ASSESSMENT FORM

QUALITY ASSESSMENT QUESTIONS	NOTES
Citation	
Was the aim of the study clearly stated?	
Was ethics considered in the study?	
Was the sample size, method appropriate	
Was the data collection appropriate?	
Was the data analyzed appropriately?	
Were the results of the study clear?	