

**SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA**



**CLIENT AWARENESS AND PARTICIPATION IN THE IMPLEMENTATION OF
THE NATIONAL HEALTH INSURANCE SCHEME BENEFIT PACKAGE FOR
ANTENATAL CARE AT LEKMA HOSPITAL**

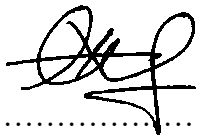
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**THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD
OF THE MASTER OF PUBLIC HEALTH DEGREE**

JULY, 2021

DECLARATION

I hereby declare that excluding precise references which have been duly acknowledged, this submission is my own work towards my MPH dissertation and that, to the best of my knowledge, it contains no material previously submitted by another person nor material which has been accepted for the award of any other degree of the University or elsewhere.



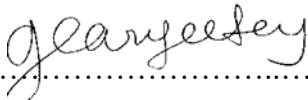
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DEDICATION

This dissertation is Dedication to Jehovah EL-GOMMA and to my children: Awentemi, Agolewen and Aviale.

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LIST OF ABBREVIATIONS

DHMTs	District Health Management Teams
DWMHIS	District-wide Mutual Health Insurance Scheme
FMHI	Free Maternal Health Initiative
GHS	Ghana Health Service
HEFRA	Health Facilities Regulatory Agency
ILO	International Labour Organisation
LEKMA	Ledzokuku Krowor Municipal Assembly
LMIC	Low and Middle Income Countries
NHIS	National Health Insurance Scheme
PHMHB	Private Health Maternity Homes Board
RHA	Regional Health Administrators
UNCTAD	United Nations Conference for Trade and Development
UNICEF	United Nations International Emergency Fund
WHO	World Health Organization

ABSTRACT

Background: Ghana, introduced the free maternal health care policy in 2008, as part of the reform package in the national health insurance scheme. However, there seem to be lack of awareness and participation among women on the benefit package of this policy.

Objective: To assess the client awareness and participation in the implementation of NHIS benefit package for antenatal care services at LEKMA hospital.

Methods: The study adopted a cross-sectional study design that used mixed methods approach to gather and analyze the data. A total of 112 pregnant women were selected using a convenience (112) and 3 nurses were selected purposively. Chi square was used to test for the association between the variables and multiple logistic regressions was used to determine the strength of association between dependent and independent variables at a 5% probability level. Manual coding was used to generate themes that resonated with objectives of the study.

Results: Free impatient care, free essential drugs, regular antenatal medication and free scan are benefits package of NHIS patients were aware of. However, the poor attitude of health personnel has no influence of implementation of the benefit package of NHIS. Yet, patients that have access to essential drugs potential enjoy the benefit package of NHIS. One of the participants explained why pregnant women are unable to access the full benefit of NHIS that the cost of running laboratory test are higher than the asking price of NHIS while claims take too long to be paid has really gone up and we cannot survive as a lab if we charge what the NHIS is expecting us to charge and also claims take forever to be paid by the NHIS.

Conclusion: There is moderately high client awareness and participation in the implementation of NHIS. Yet, from the number of services patients enjoy compared to the

number of services NHIS is supposed to provide, pregnant women are not enjoying the full NHIS benefit package.

CHAPTER ONE

INTRODUCTION

1.1 Background

World Health Organisation has recognized the equity in prepayment schemes as one of the core elements of the Universal Health Coverage (Evans and Etienne, 2010). In response, a majority of low and middle income countries (LMICs) are striving to implement prepayment schemes in order to create grounds for protecting the financial risks of the populace (Wiseman, Thabrany & Asante, 2018). These protections towards financial risk also help the citizens to have equitable access to healthcare services, most especially for the poor. It is evidently clear that some prepayment policies such as the social health insurance scheme when implemented can help reduce the rate at which out-of-pocket payments are made at the health centers and their dire consequences on households (Ruger, 2012). The adoption of the Sustainable Development Goals has made it imperative to ensure equity in the access to healthcare services and to also enjoy Universal Health Coverage (Nsiah-Boateng, Ruger and Nonvignon, 2019).

Ghana has carried out some of policy reforms in recent years help raise the financial freedom and accessibility of maternal and child health care (Witter, Garshong and Ridde, 2013). Some exemptions were brought forth in 2003-2004 for the delivery care for four regions in the country and in 2005, it was extended to the rest of the country (Witter, Arhinful, Kusi, and Zakariah-Akoto, 2007). With the reproductive health of women being one of the vital health policies in the country, the Free Maternal Health Initiative (FMHI) was introduced in 2008 to ensure the challenges that women go through in their quest to gain access to maternal health

services in the country are taken care of. This was specifically done to reduce the maternal mortality in the country and to also enhance maternal health.

The National Health Insurance Scheme allows women to access antenatal care, a skilled delivery and postnatal care services free of charge. The benefit package of the National Health Insurance covers about 95% of the diseases affecting the population. The scheme covers issues such as the outpatient services, the inpatient services, the eye care services, oral healthcare, maternity care and other emergency cases (NHIS, 2019).

Inasmuch as the first phase of the policy has been evaluated relatively, there is still little understanding on the new developments with respect to the access to reproductive as well as child health (Witter et al., 2019). The level of clients' awareness on the implications of the recent financing policies on the access to quality antenatal or reproductive health services is very vital in the country. From the foregoing, it can be seen that there are benefits that come with the NHIS and also for the pregnant women. It is therefore important to understand how many clients or pregnant women are aware of these benefit packages and also to know whether they are participating in these packages or not.

1.2 Statement of the problem

In 2008, the government of Ghana introduced and began implementation the free maternal care exemption policy via the National Health Insurance Scheme (Anafi et al., 2018). The fee exemptions on the antenatal as well as postnatal care were meant to ease the financial burden of the maternal care (Koduah, 2015). Despite the fact that this is free for the pregnant women, there have been cases where they fail to participate (i.e insisting on not paying for services already paid for by NHIA) in the operation of the benefit package. The policy in the country

suffered the plight of low awareness, limited reimbursement to the facilities and also there was no monitoring of the implementation (Witter et al., 2013).

Once a woman enrolls onto the NHIS, the scheme embolden subscribers not to pay for maternity care services including antenatal care, deliveries, caesarean section, and post-natal care. These free services notwithstanding, pregnant mothers pay for some services and medicines during antenatal clinic, because of their lack of knowledge on the NHIS benefits package. Essentially, the NHIS policy mandates pregnant mothers not to pay for any maternity care services with the primary aim of reducing maternal and neonatal mortality.

From the search of literature and in the Ghanaian setting, there is limited evidence about the level of clients' awareness and their participation in the implementation of the benefit packages. Therefore, this study sought to investigate clients' awareness and participation in the implementation of NHIS benefit package for antenatal care services at LEKMA Hospital.

1.3 Research Objectives

The main objective of the study was to assess the client awareness and participation in the implementation of NHIS benefit package for antenatal care services at LEKMA hospital.

Specifically, the study has the following objectives:

1. To assess the level of clients' awareness of NHIS benefit package for antenatal care services.
2. To determine the factors associated with awareness of NHIS benefit package
3. To investigate barriers of awareness of NHIS benefit package for antenatal care services.

4. To explore the gap between what clients receive against what is required from benefit package and why.

1.4 Research Question

The study sought to provide answers to the following research questions:

1. What is the level of clients' awareness of NHIS benefit package for antenatal care services?
2. What are the factors associated with awareness of NHIS benefit package?
3. What are the barriers to awareness of NHIS benefit package for antenatal care services?
4. What are the gaps in required from benefit package and actual services received and why?

1.5 Conceptual Framework

The study is guided by the conceptual framework in Figure 1, which is constructed by the researcher after reviewing literature from previous works done by (WHO, 2015; NHIS, 2019). The conceptual framework shows the level of awareness of NHIS benefit among pregnant mothers (free folders, medical laboratory); barriers to awareness of NHIS benefits for pregnant mothers (long queues, poor doctor-patient relationship) and the gaps in actual benefits against what pregnant mothers receive. These variables have reverse relationship among them which have effect on the full benefits inherent in NHIS. The socio-demographic characteristics of pregnant mother will help to determine if the patient receive the actual and full benefits provided by NHIS. In addition, barriers will help to know if pregnant mothers

pay for services that are free under the NHIS just to be served early. The gaps in actual benefits is central to the objective of the NHIS in reducing maternal and neonatal mortality. That is, paying for services that are ‘free’ under the NHIS could deter pregnant mother who are the financially able to seek appropriate medical care.

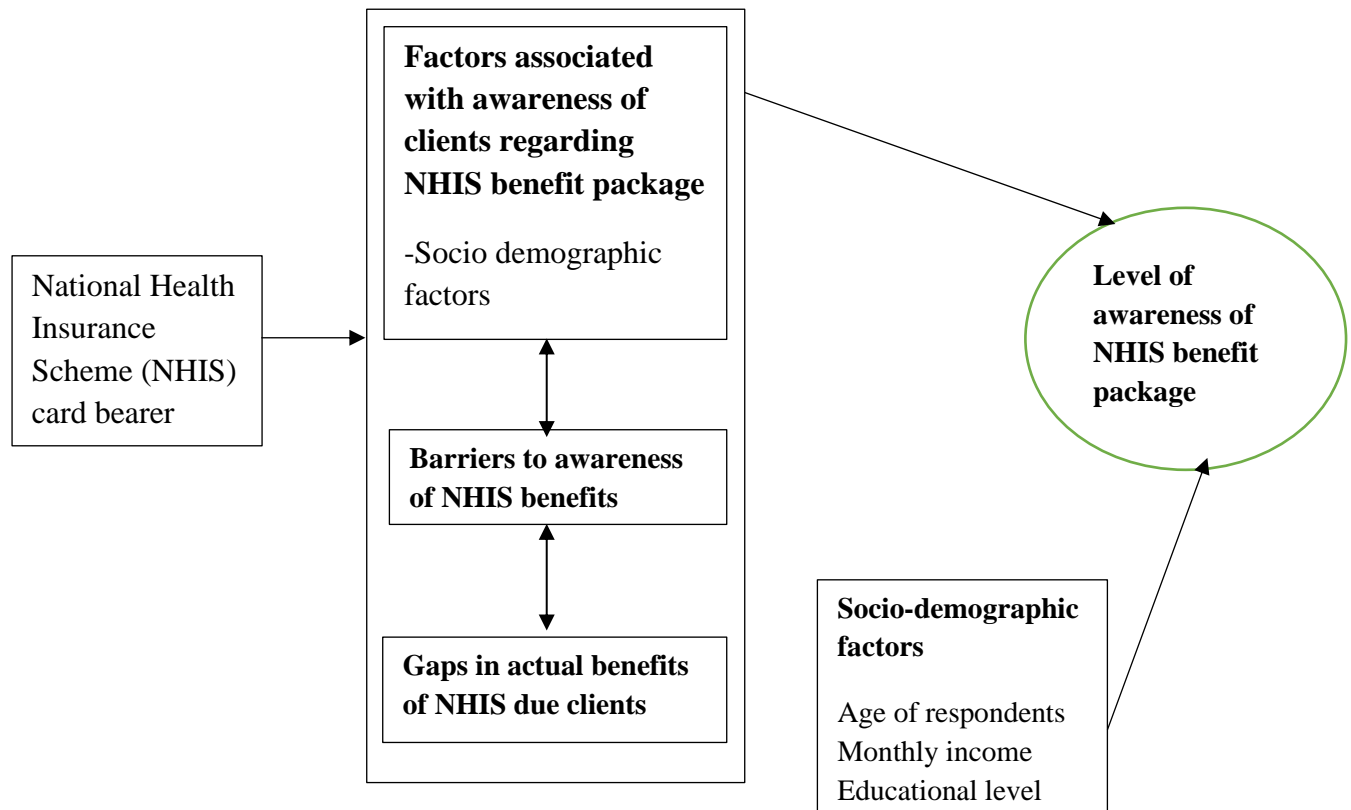


Figure 1.1 Conceptual framework
(Source: Researcher’s construct, 2020)

1.6 Significance of the study

From the search of literature, a lot has been done on women’s access to healthcare services. However, there is not much evidence on women’s awareness and their participation in the implementation of antenatal services. This study is therefore conducted to contribute to the literature gap that exists in this area of research and come out with some recommendations that would serve as policies for adoption in the country.

Inasmuch as women in the urban areas are expected to be aware of the free maternal healthcare services and all the benefits it comes with, their level of participation and easy access to the services remain doubtful. For this reason, investigating the level of clients' participation in the free maternal healthcare service in some of the urban areas remains crucial. The study therefore seeks to explore how women's awareness and participation in the implementation of the NHIS benefit package remain in the LEKMA hospital.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter two looks at the related literature on the study. It also talks about the theoretical frameworks that underpin the conduct of this study. Other concepts that have a bearing on the conduct of this are duly explained in this chapter.

2.2 Theoretical background

The theory that can serve as a basis for this study is the Social Justice Theory. This theory can help to explain the idea of quality, efficiency as well the affordable health care utilization. Social Justice Theory came into being with the introduction of the human concept of development in 1974. The concept of human development was adopted in Cocoyoc, Mexico by the United Nations Conference for Trade and Development (UNCTAD). They made a declaration that, “the whole purpose of development must be redefined. Development should not be to develop things but to develop man. Human beings have basic needs such as food, shelter, clothing, health and education. Any process of growth that does not lead to their fulfillment or even worse disrupt them is a travesty of the idea of development” (UN, 1975). According to the proponents of this theory, the living conditions of the populace should be used as a yardstick of measuring development especially in the developing countries rather than their economic indicators. The theory can be applied in this because of the rate at which patients registered with the scheme are being made to pay for services that are already paid for by the scheme. The situation is the result of delays in payments of claims to health

facilities. The theory suggests that patients who have enrolled onto the NHIS must enjoy the full benefits package irrespective of their ignorance.

There are other theories that also have a significant association with the concept of human development and some of these theories include the Structuralist Approach. This theory states that industrialization and capitalist development are seen as the main causes of the welfare state formation. The welfare state formation refers to the provision of services and income security by the government (Esping-Anderson, 1990). The approach is of the view that once a level of industrialization is achieved, the social structures such as the family and the church from the pre-industrial society would not be able to provide the services they were contributing to the society. When this happens, the state or the nation must step in to provide all these services. According to Quaye (1991), the modernization theory considers limited resources and the existence of traditional beliefs to be important issues that need to be addressed in order to achieve the required impact in the delivery of effective health care.

Other studies have refuted the essence of this theory with the claim that while a certain level of modernization may be indeed needed to ensure the welfare state development, it cannot be the lone determinant of the formation of a welfare state (Collier & Messick, 1975). They therefore suggest a model of hierarchical diffusion where countries may learn from other countries that are on a higher level of development.

2.3 Brief background of the healthcare system in Ghana

The healthcare system of Ghana has been divided or categorized into five (5) main functional levels. These categories are into the national, the regional, the district, sub district and the community levels. The Ministry of Health caters for the administration of the health services

at the national level and the ministry is also responsible for the provision of an integrated and a comprehensive healthcare system throughout the whole country (Alhassan, 2017). Once again, the ministry is tasked to formulate policies, mobilize and also allocate resources, monitor and evaluate overall performance in the health sector (Alhassan, 2017). The Ghana Health Service (GHS) is also created as an agency under the Ministry of Health by Parliamentary Act (525) 1996 to manage the affairs and provision of primary, secondary as well as some special health cases. The operation of the GHS falls under a particular council appointed by the President of Ghana.

On the hierarchy, below the national level is the Regional Health Administrations (RHAs) located in all the ten regional capitals. The RHAs is also responsible for developing a strategic health plans for the regions within the frameworks of the national policies. Their mandates include implementing guidelines that are formulated by the Ministry of Health; allocating resources within the region and also monitoring and evaluating the performance of the District Health Management Teams (DHMTs). The District Health Management Teams are also responsible for the operational planning and the implementation at the district level. The monitoring and supervision of all the district hospitals and the sub-district hospital facilities such as the clinics, polyclinics, health centers and the Community-based Health Planning and Services (CHPS) are all done by the DHMT.

According to Alhassan (2017), in 2015, the Private Hospitals and Maternity Homes Board (PHMHB) was converted to the Health Facilities Regulatory Agency (HEFRA) and it was tasked to accredit the public and the private healthcare facilities in Ghana.

2.4 Healthcare policies in Ghana

Just as all other countries are striving to provide quality healthcare for their citizenry, Ghana is of no exception. The country is thus committed in the quest to provide quality and accessible but also affordable healthcare for her members. This can even be traced back to the pre-independence epoch where all the successive governments enacted several health reforms to see to the health need of the nationalities. Before independence, the financial access to healthcare was mainly by means of out-of-pocket payments at the point of service use (Arhinful, 2003). After the independence, the government moved away from this system of payment to a tax-based financing of public sector health services. These services were therefore rendered free of charge. However, for the private health services, they continued to utilize the out-of-pocket fees at the point of service use (Arhinful, 2003).

According to Buor (2010), by the early 1970s, the tax revenue of the country was not able to support the tax-based health financing system. To cater for this challenge, the government by 1972 introduced a very low out-of-pocket fee at the point of service use for the public sector. Moving forward, the country was hit with a recess in the economy and this affected the health sector by way of shortages in medicines, poor quality of service, inadequate supplies and equipment (Buor, 2010). From these happenings, and in the early 1980s, there were a lot of deliberations to roll out a National Health Insurance Scheme (NHIS) at the national level. This called for several consultations by the Ministry of Health from international bodies such as the International Labour Organisation (ILO), European Union, World Health Organisation and the London School of Hygiene and Tropical Medicine. These consultations were done to get the technical advice on how to implement the scheme. A pilot project of this scheme

began in 1997; however, it got broken down as a result of the lack of consensus on the health financing policy (Aikins et al., 2001).

The concept of the NHIS was brought back in 2001 by the erstwhile Kuffour administration. This was one his government's key policies in order to abolish the out-of-pocket payment system which was commonly referred to as "cash and carry". The goal was to have about 50-60% of the population registered on the scheme within a period of ten years after implementation; and to have a universal coverage of everyone in the country (Cichon et al., 2003).

Before the introduction of the NHIS, several service providers were aiding in the provision of some schemes to alleviate the plights of patients. Notably, the Christian Health Association of Ghana Providers began this by experimenting in 1992 with the hospital-based health insurance and this was called the community health insurance. The idea of the Community Health Insurance Scheme was a response to the difficulty in getting access to healthcare. The first Community Health Insurance Scheme was established in the Nkoranza District of the then Brong Ahafo region (NHIS, 2013). After this, a number of district-wide schemes sprang up which finally led to the establishment of the NHIS in the year 2013. By the time the NHIS was finally implemented, there were about 57 district-wide health insurance schemes operating in the country (Mensah et al., 2009).

2.5 The National Health Insurance Scheme (NHIS)

The NHIS in Ghana was established by an Act of Parliament (2003, Act 650). It however became operational in the year 2005. Before its establishment, access to the healthcare in the country was purely based on one's ability to pay for the cost (Atinga, 2012). This was called

the fee-for-service or the “cash and carry system”. In this system, the patients who were trying to access healthcare were made or required to pay an upfront amount. This system brought about the idea of the NHIS which seeks to help achieve an equitable access and an affordable healthcare based solely on needs instead of the patients’ economic status (Witter and Garshong, 2009).

This scheme allows all persons residing in the country to have access to basic healthcare services without making any payment at the point of delivery of the service (Atinga, 2012). The scheme also enables the premium holders to be entitled to a minimum benefit package and this package includes in-patient services, out-patient services, maternity care, oral health and other emergency cases. In general, the scheme covers about 95% of all the common health problems in the country (Ministry of Health, 2004).

The Health Insurance Act (2003, Act 650) states that persons who are under the maturity age of 18 years, the aged poor are exempted from making payments of the premium. The Parliamentary Act 2003, 650 has specified two main types of schemes which could be registered and operated in the country. These are as follows:

- a. The District-wide Mutual Health Insurance Scheme (DWMHIS)
- b. Private Health Insurance Schemes

From these two main categories, the one that is most functional and thus receiving the highest number of backing by clients is the DWMHIS. The DWMHIS unlike the private health insurance scheme chiefly takes care of the informal sector workers and also the underprivileged in the society. According to Atinga (2012), the NHIS aims at building the

spirit of solidarity, a sense of belongingness, social responsibility and equity as a means of creating a vibrant and prosperous society.

The scheme also has it as a mandate and also as a need to render quality healthcare that meets the needs and the expectation of the holders of the policy. The Section 68 of the Act that establishes the scheme tasks the National Health Insurance Council to bring out strategies and measures that would ensure that healthcare providers develop programmes that ensure that the services they provide to the clients are of high quality, utilization review and there is technology assessment. These are supposed to be done so that:

- a. the quality of the healthcare services that are rendered at the NHIS accredited institutions will be of reasonable quality to the consumers.
- b. the provision of the basic healthcare services will be standard
- c. the use of medical technology and equipment will be consistent with actual need and standards of the medical practice.
- d. medical procedure and the administration of drugs are appropriate, necessary and comply with acceptable medical practice and ethics
- e. drugs and medications used for the provision of healthcare will be contained in the essential drug list of the Ministry of Health.

The scheme is funded from various sources and these include a health insurance levy of 2.5% from the VAT. Another source is a 2.5% monthly deduction from the 17.5% of formal sector workers' contribution to the Social Security and National Insurance Trust (SSNIT) fund. There is also a budgetary allocation from the government to fund the policy. Other sources of funds for the scheme include accruals from investment of surplus funds held in the National Health Insurance Fund. Furthermore, there are voluntary donations that are made by

individuals and organisations that have the intention to support the scheme. Adults from the larger informal sector also make contribution through their annual premium subscription as this is required for them to hold membership in the scheme (Seddoh et al., 2011).

2.6 The benefits of antenatal care

There is a free maternal healthcare package under the NHIS and this is to provide all pregnant women the benefit of exempting themselves from the payment of premiums. They are also exempted from all processing fee and renewal fees. All the first time members of the scheme are registered and they access the healthcare for the free. On the other hand, the existing members after they have become pregnant, they can also access the healthcare and only have to renew their membership for free after expiration (NHIS, 2010).

Antenatal care is the contacts that pregnant women have with their healthcare providers during pregnancy. This is seen to be an essential part of the maternal care period (Dixon, Tenkorang, Luginaah, Kuuire & Boateng, 2014). It is beneficial to the health status of both the mother and the child as it helps in the detection, prevention and the treatment of anaemia. It also helps in the detection and treatment of hypertension, the treatment of eclampsia (convulsions). Furthermore, the antenatal care helps to prevent any case of obstructed labour and lastly it helps in the screening for and the prevention of infections (Carroli et al., 2001). WHO (2003) states that the antenatal care helps in the treatment of malaria while Raatikainen et al. (2007) claims that the antenatal care helps in the reduction of low birth weights. The frequent antenatal care that is embarked by the pregnant women can also help them to familiarize themselves with the healthcare workers or providers and thus creating an atmosphere of comfort with the workers and that of the environment of the healthcare center. This can help increase the likelihood of having a safe delivery and post-natal care at the

healthcare facility (Mrisho et al., 2009). According to Jowett (2000), the period of antenatal care also helps to reduce the need for any expensive healthcare visits in the future as the mother had already gone through all the needed treatments and visits.

2.7 The NHIS free maternal (antenatal) care policy

From the previous maternal care program in the country which occurred between 2005 and early 2008, the antenatal care was only available for the women with a charge. However, delivery was free in all the public health facilities. On other hand, women who have been enrolled in the newly implemented NHIS would enjoy a holistic or all-inclusive benefit package (Dixon et al., 2014). The government of Ghana in 2008 saw the inequities and the inefficacies of these health schemes or policies. The government therefore in his bid to fulfill the MDG 4 and 5 which is aimed at reducing child mortality and also improving maternal health, decided to embed maternal care under the auspices of the NHIS. This was to help create an exemption for all pregnant women from paying premium or any renewal fees.

The benefit package of the maternal care under the NHIS includes antenatal care, delivery services, and post-natal care for the mother and child. It also includes a free neonate care for the baby for a period of three months after the baby has been delivered (Dzakpasu et al., 2012). Before the women can enjoy this service, there is the need for them to prove the pregnancy and this is done when they go through the process of registering on the NHIS (Witter et al., 2013).

Regardless of the fee exemptions that has been added to the maternal care policies; the limited financial standings of some women may still have an influence on their access and the use of the antenatal care in Ghana (Dixon et al., 2014). Some of the reasons behind their inability to

access the free maternal care include the cost of transport to the health center, the cost of other medicines that are not captured in the exemption policies and also the loss of their earnings as a result the time they spent moving to and fro the health facility (Finlayson & Downe, 2013). Another school of thought also has it that the socio-economic status of the women plays a huge role in determining whether the women would access and utilize the scheme (Doku et al., 2012). The researchers state that the women who are considered to be poor mainly have lesser access to the facilities and so do those who are found in the rural areas (Atunah-Jay et al. 2013).

There are other studies that have shown a positive correlation between the age of the women and their antenatal care utilization (Owoo & Lambon-Quayefio, 2013). Notwithstanding this, there is still the hope to believe that the NHIS may be able to take away some of these inequalities and improve on the access and utilization to the healthcare (Dixon et al., 2014). This was confirmed by Witter and Garshong (2009) when they found out that the introduction of the NHIS has increased the access to healthcare as it took away the out-of-pocket-costs. Members who have subscribed or paid for the premium are more than likely to visit the healthcare centers and utilize the facilities (Aboagye and Agyemang, 2013). According to Sulzbach et al. (2005), the women who are registered on the NHIS would on timely or regular basis visit the facilities.

Using propensity score matching to investigate the rate at which women access the health care centers within the urban and rural areas in two regions in Ghana, Mensah et al. (2010) found out that the NHIS has helped immensely to improve upon the women's access to the healthcare centers for antenatal care and they have also improved upon the number of deliveries that occur in the healthcare facilities. In the same way, Dzakpasu et al. (2012)

found from their analysis from seven districts in Bono Ahafo region that the free care that is enjoyed under the NHIS could lead to an increase in the usage of maternal health care in the country.

2.8 Barriers to women's participation in maternal (antenatal) care

With the free maternal care that has been implemented in the country, there is the high expectation that majority of pregnant women would enroll on it and enjoy these free services. However, there are still reports that claim some women are not participating in the free antenatal benefit package of the NHIS (Atunah-Jay et al. 2013).

This section of the study delves into the barriers that prevent the women from accessing maternal care which is virtually free of charge. From literature, the following have been seen as the main barriers to the women's participation in the maternal care.

2.8.1 Education

A lot of studies have confirmed that there is a link between one's education and her supervised delivery services (Hailu & Berhe, 2014). The educational level of a woman gives her the insight to make an informed decision about her health and the healthcare access (Atinga et al., 2015). A study by Atinga et al. (2015) revealed that young women who are educated were more likely to use the services of skilled professional assistance as compared to the other young women who have no formal education. By implication, women with higher educational status will access and enjoy the free maternal care that is provided under the NHIS; however, those with little educational background are more likely to resort to unskilled delivery and maternal mechanisms.

2.8.2 Socio-economic status of the household

The socioeconomic status of the household within which the pregnant woman comes from can also be a determining factor of whether they will access healthcare centers for their maternal care or not. According to Moyer et al. (2013), the socioeconomic status of one's household is an important factor in determining utilization of maternal care services from healthcare centers. In Kenya, young women who come from rich homes were more likely to access skilled-professional assistance during delivery as compared to those young women who were from poor households (Ochako et al., 2011). Another study in Botswana by Letamo and Rakgosi (2003) reported that the women with a very low socio-economic background were comparatively less likely to use or access maternal healthcare services from the service providers.

2.8.3 Level of women's awareness or sensitization

The rate at which women are made aware or sensitized on the health benefits of receiving maternal care can help them to utilize a supervised delivery service. A study in Ethiopia showed that the women who underwent maternal and child healthcare during their previous delivery were more than likely to seek a supervised and skilled maternal healthcare service in their subsequent pregnancies than those who had no such information (Hailu and Berhe, 2014).

It has also been established that women who have a fair idea or information about the risk factors involved in pregnancy are more likely to use supervised facility delivery and other maternal healthcare services than those oblivious to this information (Mpembeni et al. 2007).

2.8.4 The age of the pregnant mothers

There has also been research on age and the utilization of maternal care in hospitals. As women come of age, there is the likelihood for them to access and utilize maternal care services and this is because they have become more knowledgeable on the importance having maternal care and supervised delivery services (Atinga, Baku & Adongo, 2015). Another studies confirmed this assertion as Magadi, Agwanda and Obare (2007) opined that teenage mothers were less likely to access professional deliveries.

A contradictory finding was revealed by Amano et al. (2012) when they stated that younger women has the higher propensity to seek or use supervised delivery services and also utilize maternal care more than the old pregnant women because they see themselves as the high risk caucus.

2.8.5 Residence of the pregnant women

Where the pregnant women reside also influences their decision to access or participate in the free maternal care. It has been reported that mothers who dwelled in the urban centers were about five times more likely to utilize the health facilities during their maternal period than those who dwelled in the rural areas (Amano et al., 2012). In Kenya, a study by Ochako et al. (2011) found out that the young women who resided in the cities were more likely to use the services of professionals in the healthcare centers during pregnancy than those rural folks. There was a further confirmation by Letamo and Rakgoasi (2003) on this as they reported that women in Botswana dwelling in the urban centers use the health centers more than those in the rural areas.

2.8.6 Proximity to the health center

The proximity or nearness of the health facility to where the pregnant woman resides has an influence on whether the facility will be used or not. Atinga et al., (2015) found that residences that are far from the health care facility determine where the women will deliver. That is to say that the distance from the nearest healthcare center to the women's residence causes a barrier in their participation in the free maternal care. According to Gage (2007), women who lived less than an hour to the nearest health center are more likely to visit; access and participate in the free maternal care services than women who stay more hours from the nearest healthcare facility.

2.8.7 Socio-cultural factors

Women are also faced with some cultural factors that serve as a barrier in their participation in free maternal care and delivery process. Research has shown that socio-cultural factors such as women being submissive and seeking permission from their husbands or other family members before attending maternal care services can be a barrier to the access of the facility (Moyer et al., 2013).

In most African countries and households, men serve as the sole decision makers in the family and they therefore influence the decision whether their pregnant women will attend maternal care services or not (Lori & Boyle, 2011). In Uganda, men were seen to be very influential in determining whether women will deliver at home or at the health care centers. Aside this, other relatives such as mothers, mother-in-law, aunts, and sisters and so on were all influential in determining the kind of maternal services to be accessed by the pregnant woman (Amooti-Kaguna & Nuwaha, 2000).

UNICEF (1992) also found out that in Africa, there is the cultural practice where the indigenes refrain from exposing themselves or not allowing anybody (strangers) to enter during their labour period. For this reason, they end up delivering at home rather than accessing the maternal healthcare facilities. Chipfakacha (1994) also found out in Botswana that the women preferred to keep their pregnancy period at home and also deliver at home because they were not ready to trust any stranger (in this case, nurses) with the disposal of their placenta as well as other information about their conception and deliver. For this reason, they prefer to go through the whole nine months of pregnancy at home and even during and after delivery, they prefer to do it at home.

Lastly, there is a high prestige placed on women who deliver without the aid of anyone. Such women are held in high esteem for their hard work of delivering all by themselves and for those who deliver with assistance they are not respected or seen and labeled as “lazy women”. In order not to be labeled as lazy, the women rather prefer to deliver at home.

2.9 Challenges in the implementation of NHIS in Ghana

Despite the fact that the implementation of the NHIS is making tremendous benefits to the members, there are still some loopholes that are encountered in the access to this social intervention reform. Some literature have argued that even though the NHIS has led to an increase in the utilization of the formal health care services, the scheme has however failed in necessarily improving the quality of healthcare in most of the NHIS-accredited healthcare centers (GHS, 2011). In this context, the quality of healthcare service refers to the level of the clients’ satisfaction with the healthcare services that they receive at the health facilities. It can also mean the satisfaction or dissatisfaction of the women during waiting times or in queues,

availability of medicines, the reception of the staff and also the physical environment of the health center (Alhassan et al., 2016).

The provision of quality healthcare service by the service providers also include adherence to and practice of professional standards, protocols and the needed guidelines in the discharge of their duties. A report by the Ghana Health Service mentioned that the introduction of the National Health Insurance Scheme has led to an increased pressure on the health facilities and also on the staff of the health facilities. According to the report, this increased pressure has contributed to the longer waiting times of the patients. In addition, there have also been the cases of illegal charging of fees by some of the staff and also the failure to adhere to the standard professional practices by the health workers (GHS, 2011).

The satisfaction level of the patients with the quality of the healthcare in the accredited facilities is also seen to be on the low and more especially the attitude of some staff as well as the long waiting hours make the clients dissatisfied (Dzakpasu et al., 2012). In other instances, there are also the cases where some patients are given preferential treatments at the expense of others. For instance, the treatment and reception given to the clients who are NHIS-insured is nowhere near the kind of treatment given to the non-NHIS insured clients (Dzakpasu et al., 2012). The reason behind this is that the non-insured are carrying cash on themselves to the benefit of the health facility; but the NHIS-insured do not have any cash on them and for that matter, they are treated coldly.

Apart from the poor quality received from the NHIS-accredited healthcare centers, other studies have also reported that the client dissatisfaction with the services they receive from the NHIS district offices is on the rise. This is because the offices usually delay in the issuance of

the membership cards of those who have registered for the scheme (Fusheini et al., 2012). They further claim that there is no adequate education for the subscribers on the benefit packages of NHIS. Moreover, a report from SEND-Ghana in 2010 stated that some of the members who have registered for the scheme do not even have access to the healthcare services in some regions of the country such as Upper West, Upper East, Northern and Greater Accra. This inability to access the scheme is as a result of the delay in the issuance of the membership cards by the offices in the various districts (SEND-Ghana, 2010). Nonetheless, in recent times, there has been an improvement in the issuance of the membership cards after the introduction of the biometric registration system and also the prompt or instant issuance of card by the NHIA (Alhassan et al., 2016).

Another challenge that is facing the implementation of the NHIS in Ghana is the delay in the payment of claims to the healthcare service providers and also the poor administration on the part of the management. The payments are supposed to be made through the District Mutual Health Insurance Scheme (NHIA, 2013). The Auditor General in 2012 mentioned the following as the main challenges limiting the progress of the scheme:

- a. There are a number of irregularities encountered during the processing and payments of the required claims to be made at the DMHIS.
- b. There are usually the problems of delays in the payments of claims to the healthcare providers under the NHIS that are caused by the DMHIS.

The first problem which is the number of irregularities brings about the occurrence of fraudulent acts during the payment of the claims to the healthcare providers. The manual means by which the claims are processed also leads to the situation of unnecessary delays in the payment of the claims to the providers (Auditor General, 2012). When the delays in the

payments of claims to the providers occur, it impedes the smooth operations of the healthcare facilities in procuring drugs and other necessities (Dalinjong and Laar, 2012). Dalinjong and Laar (2010) therefore asserted that the delays that occur in the payment of the claims has effect on the members who have subscribed to the scheme in the following ways:

In the first place, the service providers would switch their attention to the non-subscribers who are willing to pay ready cash to enjoy the services. In this way, the non-subscribers are given a treat and spend less time at the facility as compared to those who have subscribed to the scheme.

Secondly, they claim that when the payments of the claims are delayed, the service providers devise ways of issuing prescription forms to the patients who have subscribed to go out of the facilities and get their own drugs.

The claims that are supposed to be paid to the service providers constitute about 80% of the operational funds needed in the facilities and for that matter, the delays in the payment of the claims is a major setback to the scheme (NHIA, 2013).

2.10 Empirical Review

This section reviews related studies that have been conducted on the topic in Ghana.

Adu-Gyamfi, Brenya and Adjei (2015) studied NHIS and free maternal healthcare in Ghana; using responses from women and health workers in Akropong. In other words, the researcher studied the impact of NHIS on maternal healthcare at the Akropong Health center. The descriptive survey design was used by means of the case study approach. A total of fifty (50) respondents were used for the study and this number included the health workers, the

expectant and lactating mothers who are seeking medical attention at the Akropong Health Centre in the Ashanti Region of Ghana. The responses gathered from the responses were coded and analyzed by the researcher using frequency tables and percentages. The findings from the study showed that there was an increasing or frequent access to the healthcare by the pregnant mothers. There was also the availability of free drugs and also lower cost of healthcare. The findings also revealed an improvement in the health status of the women who utilized the Akropong health facility. Though the findings reported on the increasing rate of access to healthcare by pregnant mothers, the study did not assess pregnant mother knowledge on the benefits package of NHIS. It is possible that pregnant mothers at Akropong health facility pay for services that are already paid for the NHIS. Consistent with the quantitative approach adopted by the study, this study sought to fill the gap in literature by assessing if the increasing rate of access to healthcare by pregnant mothers commensurate with the expected services they are entitled to under the NHIS.

Another study by Dixon et al. (2014) assessed whether the enrolment onto the NHIS affects the likelihood and timing of utilizing antenatal care among women in Ghana. The researchers drew data from the Ghana Demographic and Health Survey which is a national representative survey conducted in 2008. The researcher employed a cross sectional design to assess the independent effects of the enrolment in NHIS on two dependent variables. The dependent variables were therefore the frequency and timing of antenatal visits. This was done among 1,610 Ghanaian women. The negative binomial as well as the logit model was used given that count and categorical variables were used as the outcome measures respectively. Irrespective of the socio-economic and demographic features of the respondents, it was found out that the women who have enrolled in the NHIS make more antenatal care visits as compared with

those who have not subscribed. The study however failed to find any statistical association with the timing of the crucial first visit. The study also revealed that women who are educated, residing in urban areas and are wealthy were more than likely to visit the healthcare facilities for antenatal care than those who are living in the rural areas, those who are not educated and those from poorer households. The study concluded that the NHIS should be reinforced and resourced adequately as it is predicted to be an important catalyst for increasing the antenatal care attendance of the pregnant women in Ghana. Inasmuch as there are differences in the data sources and study design, the findings of the study has implications for the present study. The study found that women who are enrolled onto the NHIS make more antenatal visit, yet, the study ‘failed’ to determine if the pregnant women had complete access to the NHIS benefits package. The present study sought to fill this gap in literature by using a primary data sources and cross sectional design to determine the awareness of pregnant mothers on the NHIS benefits.

The influence of the NHIS on the behaviour of health care providers in their treatment of the insured and the uninsured clients were examined by Dalinjong and Laar (2012). The study was conducted at Bolgatanga which is an urban center and Builsa which is a rural area in Ghana. The data for the study was collected through an exit survey where 200 insured and uninsured clients of the districts were used. There were 15 in-depth interviews with the health care providers and the health insurance managers. In addition, there were 8 focus group discussions with the insured and uninsured members in the community. The findings from the study showed that the scheme promoted access to the health facilities for the insured and also helped to mobilize revenue for the healthcare providers. It was also revealed from the survey finding that both the insured and the uninsured were satisfied with the care they received from

the various facilities. Notwithstanding this improvement in the access to the health facilities by the insured clients, there was a complaint by the providers on increased workloads. The insured also complained not being physically examined well and also, they experienced discrimination in favour of the rich as well as the uninsured. The explanation the researchers received from the insured clients was the fact that they were not making immediate payments for the services unlike the affluent and the uninsured. A challenge that was revealed by the providers was the delay by the NHIS in reimbursement which led to a serious effect on the operations of the health centers. This also led to a change in behaviour by the service providers where they exhibited negative attitude towards the insured clients. Though there are similarities in the research design and data sources with the present study, there are geographic differences. There is the chance that the delay in claims repayment contributes to patients paying for services that are already paid for by the NHIS, hence, the long waiting time of the insured against the uninsured. Again, the study did not assess the awareness of insured NHIS patients on the benefits package they enjoy under the scheme. This gap in the study is filled by the present study.

The effects of Ghana's National Health Insurance Scheme on maternal and infant health care utilization were investigated by Bonfrer, Breebaart and Van de Poel (2016). The researchers used data on births before and after the intervention and applied propensity score matching to limit the bias arising from self-selection in the scheme. It was revealed that about 40% of children had a mother who is enrolled in the insurance. The implementation of the scheme has led to a significant increase in the proportion of pregnancies with at least a number of four antenatal care visits. This has also led to a significant effect on the attended deliveries. Furthermore, caesarean sections increased and the children who were born out of unwanted

pregnancies reduced. The researchers concluded that in the first years of operation, the NHIS had a modest impact on the use of antenatal care and that of the delivery care. They then asserted that the increase in the NHIS enrollment, increase in the antenatal care and the delivery care was important for other African countries that are trying to introduce the scheme or are planning universal health insurance coverage. Though there are research design and data sources differences with the present study, the study reported on increased registration onto the NHIS and subsequent increase in antenatal care visits. The study also reported an increase in caesarean deliveries, which implies that NHIS covers the cost of caesarean section. However, the study did not report on the awareness of pregnant mothers on the other benefits of NHIS package. The present sought to fill this gap in literature by using a cross sectional design and primary data sources.

To examine the implementation of fee-free maternal healthcare policy in Ghana: perspectives of the users of antenatal and delivery care services from public healthcare facilities in Accra, Anafi et al. (2018) used a qualitative study to do so. The qualitative study which comprised 12 focus group discussions as well as 6 interviews was conducted with the use of 90 women in 6 selected urban neighborhoods in Accra. This brought forth findings that showed that the direct costs of delivery care services were entirely free. On the other hand, costs that are related to antenatal care services and indirect costs that are related to delivery care still prevented pregnant women from using the hospital-based midwifery and the obstetric care. The study also found out that there were a number of misunderstandings about the health insurance scheme and this was as a result of a lot of misinformation put across by the government through the media. The authors thus recommended that all the information about both the direct and indirect costs of the antenatal and delivery care that is provided in public health-

care facilities should be resolved to take out some of the costs that have served as barriers to women accessing maternal care. This should be done to take away the cost that has been hindering the smooth operation and the sustainability of the free maternal care policy. The use of qualitative methods, as opposed to the mixed methods, is one key difference in both studies. Irrespective of the differences, the study reported that delivery care services are entirely free, yet silent on other services that are free under the NHIS yet pregnant mother pay. This study uses quantitative methods (questionnaire) to assess the awareness of pregnant mothers on NHIS benefits packages and uses qualitative methods (interviews) to ascertain why free services are paid for pregnant mothers during antenatal care visits.

2.11 Knowledge gaps

Several studies on NHIS enrollment among pregnant mothers have been undertaken in Ghana. However, the studies reviewed in this study that reported similar results on the NHIS benefit package arrived at their respective conclusions using different research designs and approaches. For example, studies by Adu-Gyamfi, Brenya and Adjei (2015) used a descriptive survey and quantitative approach while Dixon, et al., (2014) used a cross sectional design and a qualitative approach and Dalinjong and Laar (2012) used a descriptive survey and a mixed methods approach.

There is limited evidence about the level of clients' awareness and their participation in the implementation of the benefit packages. Therefore, this study sought to fill this gap in literature by assessing clients' awareness and participation in the implementation of NHIS benefit package for antenatal care services at LEKMA Hospital, using a cross sectional design and a mixed methods approach.

2.12 Summary of Chapter

The chapter two dealt with the review of literature. Theories that are underpinning the study were reviewed. The chapter also gave a brief background of healthcare system in Ghana as well as the healthcare policies in Ghana. A further look at the NHIS in Ghana was done. The chapter looked at the benefits of antenatal care and free maternal care. Barriers that prevent women from participating in the free maternal care were checked as well as the challenges in the implementation of NHIS in Ghana. Lastly, there was an empirical review on researches that have been conducted on maternal (antenatal) care and NHIS in Ghana.

CHAPTER THREE

METHODS

3.1 Introduction

This chapter focuses on the research design and method that has been adopted for the study. It also includes the study population, the sample size and sampling technique. It also describes the sources of data for the study, the data collection methods the analysis of the data.

3.2 Study design

The study employed the descriptive case study design (Zainal, 2007) using mixed methods to gather and analyze the data. With the descriptive case study research design, the researcher sought to describe the phenomena exactly as they do occur. The mixed method was appropriate for the study since it assisted the researcher in getting statistical information about the phenomenon and also get the subjective views and opinions of the respondents.

3.3 Study area

The study was conducted at the LEKMA Hospital. The hospital is situated at Teshie in Accra. It is one of the Ministry of Health's facilities built by the Chinese Government as a China-Ghana Friendship hospital. The hospital has a 100-bed capacity and has all the units of a General Hospital. The hospital also runs specialist services, laboratory and radiological facilities.

LEKMA Hospital also has a Research Center for Malaria and an Herbal Medicine Unit. It is the main general hospital for the Municipal called the Ledzokuku-Krowor (Teshie / Nungua) area. LEKMA Hospital has a clinical staff made up of a team of twenty-two (22) doctors of

which nine (9) are specialists. In all, the hospital has over two hundred (200) nurses comprising pharmacists and paramedical staff. The hospital's clinical staff is made up of a team of 22 Doctors of which 9 are specialist; over 200 nurses; pharmacist and paramedical staff. The LEKMA Hospital also has a 24-hour maternal unit and in 2014, over 2000 babies were delivered.

3.4 Data collection instruments

3.4.1 Quantitative data collection

In view of the COVID 19 outbreak, the principal investigator (PI) received a list of pregnant women with their phone numbers. This list was obtained from the antenatal unit of the hospital. This list was used to group the women into two.

Group one contained pregnant women with a minimum of secondary education. This group received questionnaire from kobocollect on their phones as well as consent forms. This group of pregnant women were literates and were able to read and answer the questions that was asked in the questionnaire. Pregnant women were pre-informed about survey and how to respond to the questionnaire. Prior to their response, the women were called to seek their permission and consent.

Group two comprised of pregnant women who had no formal education and those with basic education. The structured questionnaire was administered to them to complete with the help of the research assistants (mid-wives). Some midwives from the antenatal clinic were recruited to collect data from this group. It is expected, these nurses have been trained by their facility on how to best protect themselves and their clients and they were the best people to collect data from this group.

The main instrument that was employed for this study in gathering data from the respondents was the questionnaire. The questionnaire used for the study was adopted from Nsiah-Boateng, Prah and Nonvignon (2019) and modified to suit the current study. It was redesigned in a way so that it would cover all the necessary information under the objectives of the study. The questionnaire comprised close-ended questions and open-ended questions.

3.4.2 Qualitative data collection

Some selected staff of the antenatal clinic, laboratory, pharmacy and scan departments of the hospital were included in the in-depth interviews. All these interviews were by phone conversation instead of the usual face to face interview. The selected staff were met during antenatal clinic days and their consent sought prior to participating in the in-depth interview. Once the consent of these staff were sought, their current contact numbers were taken and arrangement was made for the interviews to be conducted. These conversations were phone recorded and later transferred onto a device for transcription. The in-depth interviews were conducted using an interview guide. The in-depth interview sought to ask service providers opinions about the barriers of receiving the full benefit packages of the free maternal health policy and also give the respondents to chance to express their views and opinions with regards to the questions.

3.5 Sources of data

Data for the study was sought from two main sources which are the primary source of data and the secondary source of data.

3.5.1 Primary source of data

The primary sources of data for both quantitative and qualitative were obtained. The qualitative data was taken from in-depth interviews. The interview was essential for the study because the researcher needed to provide an in-depth piece of work with textual contents and empirical strength to the study.

Questionnaires were administered to the patients who use the services of the LEKMA hospital in order to obtain the quantitative data for the study.

3.5.2 Secondary source of data

The secondary data refers to the data taken from any other source apart from the one at the study area. This include data collected from antenatal register. The study made use of documents from the LEKMA antenatal department. Particularly, names, educational status, mobile phone numbers from the register was used and questionnaire was sent via mobile platform for data collection.

3.6 Study population

The study population comprised of pregnant women who use the antenatal services of LEKMA hospital in Greater Accra Region of Ghana. The study further considered the staff of LEKMA hospital as a population for the in-depth interview. The results of the study can therefore be generalized for the entire LEKMA hospital.

3.7 Sampling Techniques

The study used the combination of convenience sampling and purposive sampling. These two non-probability sampling techniques were used because there was difficulty due to the busy

work schedule of the staff and haste of pregnant from existing the hospital after being attended to as a result of exhaustion, in getting the relevant sampling frame that was appropriate for a probability sampling technique.

The personnel or staff from the hospital were sampled using the purposive technique to obtain technical information that was privy to them alone.

3.8 Sample Size

The sample size was calculated using the formula provided by Yamane (1967). The formula is used for sample size calculation since the population of the study is known, the number of pregnant women who access antenatal care at LEKMA from January to June, 2020;

$$n = \frac{N}{1+N(e)^2}$$

N = Population (232) (antenatal unit of the hospital)

n = sample size

e = degree of freedom (0.05)

$$= \frac{232}{1+ 232 (0.0025)}$$

$$\frac{232}{1+0.58}$$

$$n = 146.84$$

$$n = 147 \text{ pregnant mothers}$$

Calculating for non-respondents

$$\text{Non-respondents} = \frac{n}{1-a}$$

a = Non-response rate (5%)

$$a = \frac{147}{1-0.05}$$

$$\frac{147}{0.95}$$

Non-respondents= 154.74~155

The final sample size for the study is 155. This comprised women who have delivered for the first time, those who have taken seed and those who are yet to take seed or have their first ever delivery. In conducting the in-depth interview, Francis et al. (2010) argued that saturation is usually reached with 20 interviews. Again, Guest, Bunce and Johnson (2006) stated that after 12 interviews, 92% of saturation was reached. However, three staff were interviewed

3.9 Study variables

The variables that were measured in the study was divided into dependent and independent as shown below. The scale of measurement of study variables are summarized in Table 3.1

Dependent variable

Client awareness to NHIS benefit package: This is the client self-reported awareness of NHIS services they are expected to benefit from.

Independent variables

The independent variables were as follows:

Socio-demographic factors: Age, marital status, educational attainment, religion, employment status.

Factors associated with NHIS benefit package: Age, education level, religion, employment status

Barriers to awareness of NHIS benefit package: This explores the issues that limit client's inability to access the full NHIS benefit package.

Gaps in actual benefits of NHIS benefit package: This variable assess the difference between what clients actually receive for services against what is required from the NHIS.

Table 3.1 The operational definition of variables and scale of measurement

Independent variables	Description	Scale of measurement
Factors associated with level of awareness of NHIS benefit package		
Age	Age at last birthday	Continuous
Marital status	Married, Single, Divorced	Nominal
Employment status	Self-employed and salary work	Nominal
Educational attainment	Diploma, Degree, Masters	Ordinal
Barriers to awareness of NHIS benefit package		
Attitude of health personnel	Good or poor attitude	Binary (Yes [1]/ no [0])
Long queue	Long or short waiting time	Binary (Yes [1]/ no [0])
Unavailability of doctors	Present or absent	Binary (Yes [1]/ no [0])
Gaps in actual benefits of NHIS benefit package		
Manual removal of placenta	Free services or paid services	Binary (Yes [1]/ no [0])
Caesarean section	Free services or paid services	Binary (Yes [1]/ no [0])
Eclampsia	Free services or paid services	Binary (Yes [1]/ no [0])
Dependent variable		
Client awareness of NHIS benefit package	Self-reported awareness of NHIS package of services	10 variable items, scored Categorical

3.10 Data processing and analysis

The quantitative data was analyzed using STATA, version 16. Data cleaning process was carried out by examining the responses, removing incomplete responses and checking for major outliers.

The software helped in generating basic statistics including frequencies to show the characteristics of the variables and the respondents' demographic features. The basic statistics was used in the creation of frequency tables and figures. Descriptive statistics was used to assess the socio-demographic characteristics of respondents. Afterwards, chi-square was used to assess the level of clients' awareness of NHIS benefit package for antenatal care services. Ten (10) variables/statements were used to assess client awareness (Table 4.2). Each variable had a yes (1) or no (0) (response). The responses from ten variables were merged and scored. These responses were scored from 0 (least level of awareness) to 10 (highest level of awareness). The variables were sub-categorized into low (scores 0-4), medium (scores 5-&) and high (scores 8-10). Also, the variable gap in coverage of NHIS was divided into as obstetrics and gynecology and laboratory services (Table 4.5). The obstetrics and gynecology variables included eight (8) statements with a yes (1) or no (0) response. The yes response were renamed paid services and the no responses renamed as free services. Similarly, chi-square test of difference was used to assess the barriers of awareness of NHIS benefit package for antenatal care services. Logistic regression was used to assess the association between awareness of NHIS benefit package (dependent variable) and the independent variables. Significance was ascertained at 0.05 ($p < 0.05$) significance level.

In addition, the qualitative data were recorded and transcribed and the essential points taken were categorized and marked in units for the analysis to be done. Thematic principles was applied in the qualitative data analyses. The qualitative data was sieved, grouped and put together according to the questions that relate to them. The summary of the qualitative data was done based on the grouped or the patterned responses together with the number of times the particular response was stated during the interview process. In handling the qualitative

data, the researcher made follow up calls on the interviewees so as to double check and confirm the responses they provided during the interview sessions. This was done to validate the statements made by the respondents during the interview.

3.11 Ethical considerations

Approval for the study was obtained from the Ghana Health Service Ethics Review Committee (GHS-ERC 039/07/20). Permission was also be sought from the LEKMA Hospital. On the part of the respondents, an informed consent was sought after the explanation of the objectives and the methodology.

Due to the outbreak of COVID19 in the country, the principal investigator ensured that research assistants (midwives) received nose mask hand sanitizers and liquid hand wash soap. The midwives ensured that participants washed their hands, wore a nose mask and sat apart about 2m from each other to collect data using a questionnaire.

Participant Consent

All the respondents were talked to for them to express their consent before their participation in the study. Before the interviews, all the participants were asked to fill a consent form from which they read and signed. For those who cannot read, the researcher explained the purpose of the study to them and their acceptance or denial to be part of the study was sought. When they accept to be part, their thumbprints on the form was taken.

Confidentiality

The respondents were assured that any information they provided will strictly be used for only the purpose of the study and nothing else. They were also assured that their responses will not be revealed to any third party.

Risk and Benefit

The respondents were assured that the study or the research did come with no risk or cost. The risk of exposing PI and respondent was drastically reduced by employing phone conversation and google survey for majority of data collection, the few pregnant women who could not read and write had a health professional (midwife) to help them complete the questionnaire. The only cost on their part was their precious time to respond to the questionnaire.

Compensation

The respondents of the study were given a free face mask, hand sanitizer and liquid hand wash soap. Additionally, the respondents were enlighten on the benefit package of NHIS they had no idea of.

Voluntary participation

Participants and/or respondents were assured that they can exit being part of the study without any form prejudice from the researcher and the research team.

Data storage and usage

Data obtained from respondents included audio recordings, images, transcription of interviews is stored electronically on an external drive and a computer, with a password known only to the principal investigator. The external drive is kept under lock by the principal investigator. All files of the research work stored on the computer is password protected. Both

soft and hard copy data is kept by the principal investigator for a maximum of 5 years to allow for publication of the research, after which it will be destroyed permanently by formatting electronic devices completely and burning hard copy data.

Conflict of interest

There is no conflict of interest in doing this study and presentation

CHAPTER FOUR

RESULTS

4.0 Introduction

The chapter is presented in four main sections as; the socio-demographic characteristics of pregnant mothers; the level of clients' awareness of NHIS benefit package for antenatal care services; the barriers of awareness of NHIS benefit package for antenatal care services and the gap between what clients receive against what is required from benefit package.

4.1 Socio-demographic characteristics of respondents

The response rate for the study was 72.3% (112/155). The socio-demographic characteristics of patients attending antenatal care at LEKMA Hospital has been reported in Table 4.1. About 30.4% were between the age category 26-30 years and the least represented age category was patients between 15-20 years (8.0%). Generally, the mean age of the patients was 31.13 ± 6.76 . The unmarried (single) patients constitute (51.8%) of the total sample. The percentage of the patients seeking antenatal services who had up to tertiary education was (55.4%), most of the patients (86.6%) indicated that they were Christians. Patients who were employed constitute 72.3% of the total sample.

Table 4.1: Socio-demographic characteristics of pregnant mothers at LEKMA hospital

Variables	Number	Percentage (%)
Age (years):		
15 -20	9	8.0
21-25	12	10.7
26-30	34	30.4
31-35	26	23.2
≥36	31	27.7
Mean (SD)	31.125 (6.764)	
Marital status		
Divorced	3	2.7
Married	51	45.5
Single	58	51.8
Educational attainment		
JHS/JSS	15	13.4
No formal education	8	7.1
Primary education	8	7.1
SSS/SHS/Voc	19	17.0
Tertiary	62	55.4
Religion		
Christian	97	86.6
Muslim	15	13.4
Employment status		
Employed	81	72.3
Student	10	8.9
Unemployed	21	18.8

4.2 Clients' awareness of NHIS benefit package for antenatal care services

About 90.2% (101) respondents indicated that they 'enjoy' free consultation as well as free folder charges because of their NHIS status, and 71.1% of the respondents also indicated that the NHIS provide them free inpatient care when they attend antenatal clinic, all these details can be found in Table 4.2. A further 60.7% of the respondents indicated that NHIS provides them with free essential drugs and 76.8% indicated that they get regular antenatal medication such as Iron3, folic acid and calcium supplement for free.

On the other end, 76.8% of the respondents do not get regular antenatal medication; 53.6% pay for laboratory examination and 67.0% pay for scans. Also, 66.1% do not 'enjoy' free medical care through pregnancy although they have valid NHIS cards. It was revealed that

57.1% (278) of the respondent pay for normal and caesarean delivery. Additionally, 67.0% of the respondents are aware that they have unlimited health care as result of their NHIS status.

Table 4.2: Awareness of NHIS benefit package for antenatal services at LEKMA Hospital

Variables	Response	
	No, n (%)	Yes, n (%)
1 Does NHIS provide free outpatient consultation, thus I do not pay consultation or folder fees?	11 (9.8)	101 (90.2)
2 Does NHIS provide free inpatient care for you?	32 (28.6)	80 (71.4)
3 Does NHIS provides you with free essential drugs such as diabetic drugs and anti-retroviral drugs?	44 (39.3)	68 (60.7)
4 Do you get regular antenatal medication such as Iron3, folic acid and calcium supplement for free as a registered NHIS card bearer?	26 (23.2)	86 (76.8)
5 Do you receive laboratory examination for free?	60 (53.6)	52 (46.4)
6 Do you pay for maternity care (normal and caesarean delivery)?	48 (42.9)	69 (57.1)
7 Do you receive free medical care when sick during pregnancy?	38 (33.1)	74 (66.1)
8 Do you receive free scan services?	75 (67.0)	37 (33.0)
9 Did you know your insurance package covers your baby for the first 3 months of life?	47 (42.0)	65 (58.0)
10 Do you know you have unlimited health care covered by your insurance?	75 (67.0)	37 (33.0)

4.2.1 Respondents combined level of awareness on NHIS benefit package

The level of awareness of NHIS benefit package are presented in Figure 4.1. Most of the respondents (54.5%) had high level of awareness on the NHIS benefits package.

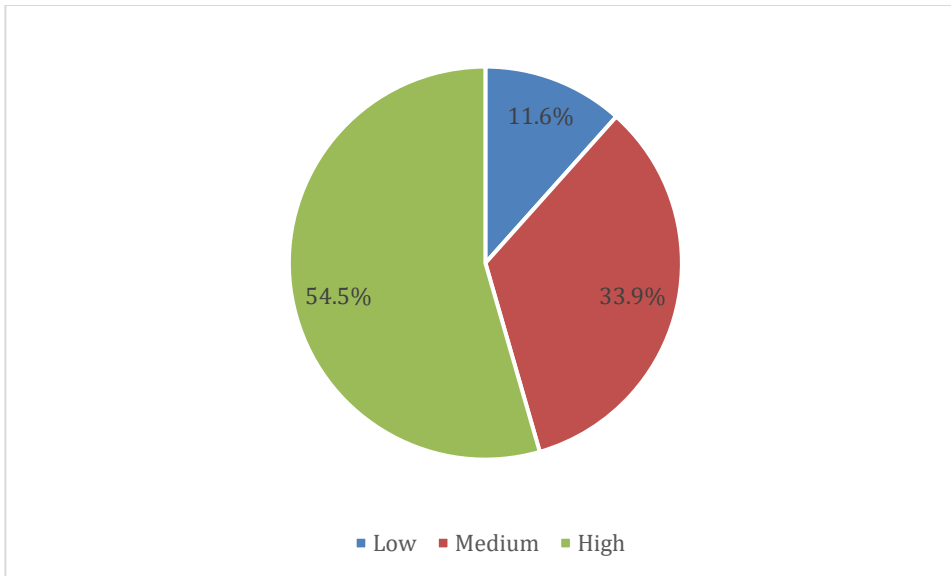


Figure 4.1: Level of awareness among NHIS cardholders at LEKMA

4.2.2 Association between socio-demographic factors and awareness of NHIS benefit package

The association between socio-demographic factors and awareness of NHIS benefit package are shown in Table 4.3. From the chi square test of association, there was significant association between educational attainment ($p=0.044$); religion ($p=0.0202$); employment status (0.0416) and awareness of NHIS benefit package.

Table 4.3: Association between socio-demographic factors and awareness of NHIS benefit package for antenatal services at LEKMA Hospital

Variables	Awareness of NHIS benefit package			χ^2	p-value
	Low, n (%)	Medium, n (%)	High, n (%)		
Age (years)				4.9431	0.039+
15 -20	1 (6.3)	3 (9.7)	5 (7.7)		
21-25	0 (0.00)	3 (9.7)	9 (13.8)		
26-30	6 (37.5)	10 (32.3)	18 (27.7)		
31-35	5 (31.3)	9 (29.0)	12 (18.5)		
≥36	4 (25.0)	6 (19.4)	21 (32.33)		
Marital status				0.2834	0.859+
Divorced	0 (0.00)	1 (3.2)	2 (3.0)		
Married	6 (42.9)	10 (32.3)	25 (37.3)		
Single	8 (57.1)	20 (64.5)	40 (59.7)		
Educational attainment				5.7707	0.013*+
JHS/JSS	2 (15.5)	4 (13.8)	9 (12.9)		
No formal education	0 (0.00)	2 (6.9)	6 (8.6)		
Primary education	0 (0.00)	3 (10.3)	5 (7.1)		
SSS/SHS/Voc	3 (23.1)	6 (20.7)	10 (14.3)		
Tertiary	8 (61.4)	14 (48.3)	40 (57.1)		
Religion				6.2536	0.0202*+
Christian	7 (100)	30 (81.0)	60 (88.2)		
Muslim	0 (0.00)	7 (19.0)	8 (11.8)		
Employment status				12.505	0.0416*+
Employed	11 (78.6)	20 (62.5)	50 (75.8)		
Student	0 (0.00)	4 (12.5)	6 (9.1)		
Unemployed	3 (21.4)	8 (25.0)	10 (15.1)		

χ^2 = Chi Square; n-cell frequency; % =column percentages. += Fisher's exact test of association; *:= p<0.05.

4.3 Barriers to awareness of NHIS benefit package

The barriers to awareness of the NHIS benefit package is shown in Table 4.4. About, 67.0% of the patients indicated that most of the drugs prescribed by the physician were unavailable for free, and 60.7% of the patients, were in a haste to exist the hospital because of the poor attitude of the health personnel. In addition, the long queue at the hospital deter most of the respondents from seeking further insights on the packages the NHIS offers them (72.3%).

Table 4.4: Barrier to awareness of NHIS package for antenatal services at LEKMA Hospital

Variables	Response	
	No, (%)	Yes, (%)
Do you buy most of the drugs prescribed by your physician?	37 (33.0)	75 (67.0)
Does the poor attitude of the health personnel hamper you from accessing full benefit of NHIS?	44 (39.3)	68 (60.7)
Do you think long queues in NHIS accredited health facilities prevents you from accessing the full benefit of being an NHIS card bearer	31 (27.7)	81 (72.3)
Doctors are usually not available to attend to my child	67 (59.8)	45 (40.2)

4.4 Gaps in accessing full NHIS benefit package

Generally, the NHIS provides an array of services at no cost, however, most patients do not have complete access to these ‘free’ services. The gaps in the services provided to women by the laboratory and obstetrics and gynecology are reported in Table 4.5.

On one hand, out of the about seven (7) services pregnant women are to ‘enjoy’ for free, it was observed that most of the patients enjoyed two services under obstetrics and gynecology, that is, manual removal of placenta (58.9%) and spontaneous vaginal delivery with or without episiotomy (40.2). On the other hand, pregnant women enjoy three (3) out of five (5) free services for free under the NHIS. That is, haemoglobin estimation (51.8%), glucose-6-phosphate dehydrogenase (56.3%), and routine urine examination (78.6%) are services ‘enjoyed’ at the laboratory.

Several suggestions were made by a laboratory technician and a pharmacist on why pregnant women were unable to access the full benefits of NHIS. One of the participants opined that

“The cost of testing has really gone up and we cannot survive as a lab if we charge what the NHIS is expecting us to charge and also claims take forever to be paid by the NHIS” (laboratory staff)

Another participant ascribed the challenge to increasing prices of drugs which are not subsidized by government and hence users or card bearers of NHIS are ‘forced’ to pay for them.

“The NHIS should update the drug list as and when prices of drugs go up. This will help us serve more drugs on the drug list. NHIS should pay for iron supplement syrup in total instead of paying for only one bottle which is about 200ml, the pregnant woman is then forced to buy the extra bottle to make a monthly dose” (Pharmacist).

Table 4.5: Gaps in actual benefits of NHIS package for antenatal services at LEKMA Hospital

Free obstetrics and gynecology under the NHIS	Response	
	Paid, n (%)	Free, n (%)
Manual removal of placenta	46 (41.1)	66 (58.9)
Instrumental delivery	67 (59.8)	45 (40.2)
Caesarean section	70 (62.5)	42 (37.5)
Destructive delivery	83 (74.1)	29 (25.9)
Spontaneous Vaginal Delivery with or without Episiotomy	45 (34.8)	67 (40.2)
Post-Partum Haemorrhage	73 (65.2)	39 (38.8)
Eclampsia	81 (72.3)	31 (27.7)
Free Laboratory services under the NHIS		
Haemoglobin Electrophoresis	65 (58.0)	47 (42.0)
Haemoglobin Estimation (HB)	54 (48.2)	58 (51.8)
Routine Stool Examination	63 (56.3)	49 (43.7)
Glucose-6-Phosphate Dehydrogenase (G6PD)	49 (43.7)	63 (56.3)
Routine Urine Examination	24 (21.4)	88 (78.6)

4.5 Bivariate association between barriers of awareness and NHIS benefit package

Table 4.6 present details of the association between barriers of awareness and NHIS benefits package for antenatal services at LEKMA Hospital. There was no statistically significant association between barriers of awareness and benefit under NHIS package ($p > 0.05$). For example, there is no association between poor attitude of health personnel and benefits under NHIS (chi square = 1.1625, p-value = 0.516).

Table 4.6: Bivariate association between barriers of awareness and NHIS benefit package for antenatal services at LEKMA Hospital

Obstetrics and gynecology	Awareness of NHIS benefit package			χ^2	p-value
	Low, n (%)	Medium, n (%)	High, n (%)		
Regular purchase of medication				2.1471	0.179
No	8 (21.6)	10 (27.0)	19 (51.4)		
Yes	6 (7.6)	32 (40.5)	41 (51.9)		
Poor attitude of the health personnel				1.1625	0.516
No	10 (22.7)	14 (31.8)	20 (45.5)		
Yes	12 (18.1)	15 (22.8)	39 (59.1)		
Long queues/waiting time				0.1431	0.320
No	8 (25.8)	11 (35.5)	12 (38.7)		
Yes	21 (16.8)	40 (32.0)	64 (51.2)		
Unavailability of physicians				0.5237	0.502
No	15 (22.4)	20 (29.9)	32 (47.8)		
Yes	9 (20.0)	14 (31.1)	22 (48.9)		

χ^2 = Chi Square; n=cell frequency; % =row percentages. += Fisher's exact test of association; *:= p<0.05.

4.6 Bivariate association between gaps in actual benefits of NHIS benefit package

Table 4.7 present details of the association between gaps and NHIS benefits package for antenatal services at LEKMA Hospital. There was no statistically significant association between caesarean section and awareness of NHIS benefit package (p=0.104). However, statistical significant association was observed between obstetrics and gynecology services and benefits under NHIS. On the laboratory services, statistical significant association was observed between the services provided and benefits under NHIS package.

Table 4.7: Bivariate association between gaps in actual benefit and awareness of NHIS benefit package for antenatal services at LEKMA Hospital

Obstetrics and gynecology	Awareness of NHIS benefit package			χ^2	p-value
	Low, n (%)	Medium, n (%)	High, n (%)		
Manual removal of placenta				7.494	0.004*
No	10 (21.7)	13 (28.3)	23 (50.0)		
Yes	5 (7.6)	20 (30.3)	41 (62.1)		
Instrumental delivery				10.351	0.001*
No	12 (17.9)	18 (26.9)	37 (55.2)		
Yes	3 (6.7)	12 (26.7)	30 (66.6)		
Caesarean section				2.602	0.104
No	6 (8.6)	20 (28.6)	44 (62.9)		
Yes	7 (16.7)	10 (23.8)	25 (59.5)		
Destructive delivery				7.835	0.020*
No	9 (10.8)	34 (41.0)	40 (48.2)		
Yes	4 (13.8)	8 (27.6)	17 (58.6)		
Spontaneous Vaginal Delivery with or without Episiotomy				12.636	0.000*
No	8 (17.8)	16 (35.5)	21 (46.7)		
Yes	14 (20.9)	19 (28.4)	34 (50.7)		
Post-Partum Haemorrhage				22.139	0.000*+
No	13 (17.8)	23 (31.5)	37 (50.7)		
Yes	2 (5.1)	7 (17.9)	30 (76.9)		
Eclampsia				9.453	0.004*+
No	15 (18.5)	26 (32.1)	40 (49.4)		
Yes	4 (12.9)	8 (25.8)	19 (61.3)		
<i>Free Laboratory services under the NHIS</i>					
Haemoglobin Electrophoresis				19.429	0.000*
No	14 (25.9)	17 (31.5)	23 (42.6)		
Yes	7 (12.1)	18 (31.0)	33 (56.9)		
Haemoglobin Estimation (HB)				34.495	0.000*+
No	15 (23.8)	20 (31.7)	28 (44.4)		
Yes	3 (6.1)	14 (28.6)	32 (65.3)		
Routine Stool Examination				33.801	0.000*
No	12 (24.5)	16 (32.7)	21 (42.8)		
Yes	5 (7.9)	18 (28.6)	40 (63.5)		
Glucose-6-Phosphate Dehydrogenase (G6PD)				29.159	0.000*
No	3 (12.5)	9 (37.5)	12 (50.0)		
Yes	17 (19.3)	29 (33.0)	42 (47.7)		
Routine Urine Examination				31.387	0.000*
No	4 (12.5)	8 (25.0)	20 (62.5)		
Yes	13 (16.3)	19 (23.8)	48 (60.0)		

χ^2 = Chi Square; n-cell frequency; % =row percentages. += Fisher's exact test of association; *:= p<0.05.

4.7 Multiple logistic regression of independent variables and NHIS benefit package

Table 4.8 show details of the association between independent variables (socio-demographic factors, barriers and gaps in actual benefits) and awareness of NHIS benefit package. There was no significant association between patient characteristics (age, educational attainment, religion, and employment status) and awareness of NHIS benefit package.

There was significant association between gaps in actual benefits and NHIS benefit package. For example, there was 77% increased odds of experiencing free destructive delivery under NHIS among patients who have suffered the condition than those who have not experienced it yet (COR=0.23; 95%CI=0.07, 0.71).

Table 4.8: Multivariate analysis between independent variables and NHIS benefit package for antenatal services at LEKMA Hospital

	COR , 95% CI	p-value	AOR, 95% CI	p-value
Age (years)				
15 -20	1		1	
21-25	2.40 (0.38, 15.32)	0.355	2.64 (0.32, 21.92)	0.370
26-30	1.47 (0.33, 6.51)	0.615	0.83 (0.12, 5.63)	0.849
31-35	1.51 (0.32, 7.07)	0.600	0.73 (0.10, 5.14)	0.753
≥36	1.68 (0.37, 7.64)	0.7644	0.78 (0.11, 5.32)	0.798
Educational attainment				
JHS/JSS	1		1	
No formal education	2.00 (0.29, 13.44)	0.476	1.61 (0.22, 11.86)	0.641
Primary education	1.11 (0.19, 6.49)	0.907	0.95 (0.15, 6.06)	0.955
SSS/SHS/Voc	0.74 (0.18, 2.92)	0.668	0.55 (0.12, 2.43)	0.427
Tertiary	1.63 (0.51, 5.25)	0.413	1.16 (0.31, 4.34)	0.829
Religion				
Christian	1		1	
Muslim	0.54 (0.18, 1.61)	0.268	0.64 (0.17, 2.41)	0.514
Employment status				
Employed	1		1	
Student	0.67 (0.17, 2.58)	0.560	0.27 (0.03, 2.46)	0.245
Unemployed	0.59 (0.22, 1.59)	0.302	0.63 (0.19, 2.06)	0.448
Gaps in actual benefits				
Manual removal of placenta				
No	1		1	
Yes	3.40 (1.50, 7.69)	0.003*	1.93 (0.72, 5.22)	0.193
Instrumental delivery				
No	1		1	
Yes	3.75 (1.52, 9.25)	0.004*	0.85 (0.25, 2.90)	0.796
Destructive delivery				
No	1		1	
Yes	0.23 (0.07, 0.71)	0.011*	0.50 (0.12, 2.09)	0.346
Spontaneous Vaginal Delivery with or without Episiotomy				
No	1		1	
Yes	4.33 (1.89, 9.93)	0.001*	1.75 (0.67, 4.60)	0.254
Post-Partum Haemorrhage				
No	1		1	
Yes	1.80 (0.43, 0.86)	0.000*	9.85 (1.86, 5.34)	0.007
Eclampsia				
No	1		1	
Yes	4.88 (1.56, 5.25)	0.006*	0.49 (0.09, 2.74)	0.420
Haemoglobin Electrophoresis				
No	1		1	
Yes	9.82 (3.77, 11.56)	0.000*	1.56 (0.36, 6.84)	0.552
Haemoglobin Estimation				
No	1		1	
Yes	6.17 (5.39, 8.20)	0.000*	8.90 (1.47, 3.84)	0.017*
Routine Stool Examination				
No	1		1	
Yes	9.33 (4.03, 10.25)	0.000*	7.90 (1.90, 10.19)	0.004*
G6PD				
No	1		1	
Yes	7.24 (3.81, 9.49)	0.000*	6.14 (0.98, 8.40)	0.052
Routine Urine Examination				
No	1		1	
Yes	8.41 (6.59, 11.42)	0.000*	9.24 (1.94, 14.95)	0.005*

COR=Crude odds ratio; CI=Confidence interval; AOR=Adjusted odds ratio, 1=Reference category *p<0.05.

CHAPTER FIVE

DISCUSSION

5.0 Introduction

The chapter explains the findings of the study by comparing with relevant literature. The chapter is presented in three main sections as the level of clients' awareness of NHIS benefit package for antenatal care services; the barriers of awareness of NHIS benefit package for antenatal care services and the gap between what clients receive against what is required from benefit package.

The key findings from this study were as follows: (1) A greater number of the patients (30.4%) were between the age category 26-30 years; were unmarried (single) (51.8%); had up to tertiary education (55.4%), were Christians (86.6%) and employed (72.3%). (2) Most of the respondents were aware of the benefits under the NHIS by indicating that they 'enjoy' free consultation as well as free folder charges. Some of the patients were unaware of the benefits NHIS provides by indicating that they do not get regular antenatal medication; pay for laboratory examination and scans. (3) Coupled with poor attitude of the health personnel and long waiting time, a large number of the patients indicated that drugs prescribed by physicians are unavailable for free, these are some of the barriers of awareness to NHIS benefits. (4) Most of the patients enjoyed two services under obstetrics and gynecology, that is, manual removal of placenta and spontaneous vaginal delivery with or without episiotomy. Also, haemoglobin estimation, glucose-6-phosphate dehydrogenase, and routine urine examination are free services at the laboratory for NHIS members.

5.1 The level of clients' awareness of NHIS benefit package for antenatal care services

The findings revealed that some of the pregnant women were unaware of the benefits under the NHIS packages, hence, pay for services that are free under the NHIS as confirmed by findings from the qualitative approach. The gap in the level of awareness on the benefits under NHIS can be ascribed to cultural practices where the UNICEF (1992) report on maternal delivery in the African context, concluded that there is cultural practice where the indigenes refrain from exposing themselves or not allowing anybody (strangers) to enter during their labour period. This suggests that most pregnant mothers end up delivering at home rather than accessing the maternal healthcare facilities. The findings further suggest that the NHIS has a lot of benefits for pregnant mothers, however, these packages are 'hidden' from first time mothers and mothers who are in dire need of services in order to deliver. Similarly, the finding is consistent with that of Chipfakacha (1994) which revealed that women in Botswana preferred to keep their pregnancy period at home and also deliver at home because they were not ready to trust any stranger with the disposal of their placenta as well as other information about their conception and deliver. This suggests that pregnant women who prefer to go through the whole nine months of pregnancy at home, are more likely to forfeit the benefits inherent in the NHIS package. Hence, women who are culturally inclined are less enthused about free maternal healthcare delivery and the benefits that accompany it thereof irrespective of their awareness levels on NHIS.

Findings from this study established that pregnant women seeking antenatal services had high level of awareness of the free inpatient care, free essential drugs, and regular antenatal medication free scan services under NHIS benefits package. This finding is in agreement with a study by Adu-Gyamfi, Brenya and Adjei (2015) which revealed an increasing or frequent

access to the healthcare by the pregnant mothers. There was also the availability of free drugs and also lower cost of healthcare. The findings suggest that the benefit package provided by the NHIS is best accessible by pregnant mothers who frequent the hospital during antenatal.

5.2 The barriers of awareness of NHIS benefit package for antenatal care services

Findings from this study showed that 67.0% of the patients indicated that most of the drugs prescribed by the physician are unavailable for free, and 60.7% cited the poor attitude of the health personnel as a barrier to their awareness of NHIS benefit package. The finding is consistent with a study conducted in Bolgatanga by Dalinjong and Laar (2012) which revealed that the insured also complained of long waiting times and verbal abuse from the staff. This suggests that the quality of healthcare service by the service providers contradicts the practice of professional standards, protocols and the needed guidelines in the discharge of their duties, hence, hampering the awareness of NHIS package for antenatal care services.

In addition, the long queue at the hospital deter most of the respondents from seeking further insights on the packages the NHIS offers them (72.3%). A report by the Ghana Health Service mentioned that the introduction of the National Health Insurance Scheme has led to an increased pressure on the health facilities and also on the staff of the health facilities. According to the report, this increased pressure has contributed to the longer waiting times of the patients (GHS, 2011). Furthermore, the satisfaction level of the patients with the quality of the healthcare in the accredited facilities is also seen to be on the low and more especially the attitude of some staff as well as the long waiting hours make the patients dissatisfied (Dzakpasu et al., 2012). This implies that the patients (pregnant women) who are non-insured

are carrying cash on themselves to the benefit of the health facility; but the NHIS-insured patients do not have any cash on them and for that matter, they are treated coldly.

5.3 The gap between what clients receive against what is required from benefit package

The study revealed that most of the patients enjoy only two services under obstetrics and gynecology, that is, manual removal of placenta (58.9%) and spontaneous vaginal delivery with or without episiotomy (40.2) as well as haemoglobin estimation (51.8%), glucose-6-phosphate dehydrogenase (56.3%), and routine urine examination (78.6%) services under laboratory. This finding is in agreement with a study by Bonfrer, Breebaart and Van de Poel (2016) which revealed that the implementation of NHIS has led to a significant increase in the proportion of pregnancies, thus, caesarean sections increased and the children who were born out of unwanted pregnancies reduced. This implies that increasing the awareness of the packages offered by NHIS is key to reducing maternal and neonatal mortality. It is therefore important that the 'free' packages under the NHIS that inure to the benefit of pregnant women be highlighted to these women during antenatal as this approach will increase awareness and participation in NHIS utilization.

The finding supports result from a study by Anafi et al. (2018) which established that the direct costs of delivery care services were entirely free for NHIS holders, however, costs that are related to antenatal care services and indirect costs that are related to delivery care still prevent pregnant women from using the hospital-based midwifery and the obstetric care. The findings implies that there are a number of misunderstandings about the health insurance scheme as a result of a lot of misinformation put across by the government through the media. Hence, all the information about both the direct and indirect costs of the antenatal and

delivery care that is provided in public health-care facilities should be resolved to take out some of the costs that have served as barriers to women accessing maternal care.

5.4 Limitations of the study

The study recorded some limitations. The study used convenience sampling techniques to select study participants; it was possible that some pregnant women may have been missed. However, the effect of this on the study estimates need to be verified. Again, the cross-sectional design restricted the ability to discern any temporality. Future studies that follow pregnant women prospectively and collect data on services provided those under the NHIS will help to clarify this possibility.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The study concludes that client awareness and participation in the implementation of the National Health Insurance Scheme (NHIS) is moderately high from the number of services patients enjoy compared to the large number of services the scheme is supposed to provide to patients (pregnant mothers) during antenatal services is clear indication that pregnant women are not enjoying the full benefits of the NHIS. The key findings from this study were as follows: (1) some of the pregnant women pay for services that are free under the NHIS, thus, awareness of the benefits under the NHIS is not exhaustive. (2) Poor attitude of the health personnel and long queues coupled with unavailability of physicians are some barriers to the awareness of NHIS benefit package among pregnant mothers. (3) Though the NHIS provides an array of services to patients (pregnant mothers) for free, only handful of services, for example manual removal of placenta, spontaneous vaginal delivery with or without episiotomy, haemoglobin estimation, glucose-6-phosphate dehydrogenase, and routine urine examination, are provided at no cost.

6.2 Recommendations

The study makes the following recommendations:

1. It is recommended for the National Commission on Civic Education (NCCE) to embark on sensitization and education on the NHIS and services that are designed for pregnant mothers. Doing this will increase the awareness of pregnant mothers, especially those in rural and peri-urban communities, to seek prompt antenatal care.

2. It is also recommended for the National Health Insurance Authority (NHIA) to reconsider expanding the range of service coverage to cater for expensive medications and other complex surgeries to reduce the cost borne by patients. Aside, there should be constant availability of medicine for pregnant mothers at the pharmacy at all times.
3. It is also important that management of government hospitals in the hospital ensures that nurses, doctors and other health care providers are monitored from time to time to ensure they relate cordially with their patients (pregnant women) to help patients be at ease to tell them what their health needs are to get the needed attention and also enjoy the full benefit the NHIS provides.

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APPENDICES

Appendix A: Research questionnaire

QID	QUESTIONS	Coding categories
Section A: Socio-Demographic Characteristics of Respondents		
1	Age of respondentsyears
2	Marital status	Single.....1 Married.....2 Divorced before diagnosis.....3 Divorced after diagnosis.....4 Widowed.....5
3	Education attainment?	No formal education.....1 Primary education.....2 JHS/JSS.....3 SSS/SHS/Voc.....4 Tertiary.....5
4	Religion	Christian.....1 Muslim.....2 Traditionalist.....3 Others (specify).....4
5	Employment status	Employed.....1 Unemployed.....2 Student.....3
CLIENT AWARENESS OF BENEFIT PACKAGE OF NHIS		
Kindly indicate your level of awareness of benefit package of NHIS by ticking the correct option once		
7	Does NHIS provides free outpatient consultation, thus I do not pay consultation or folder fees?	Yes.....1 No.....2
8	Does NHIS provides free impatient care and shared accommodation for you?	Yes.....1 No.....2
9	Does NHIS provides you with free essential drugs such as diabetic drugs and anti-retroviral drugs?	Yes.....1 No.....2
10	Do you get regular antenatal medication such as Iron 3, folic acid and calcium supplement for free as a registered NHIS card bearer?	Yes.....1 No.....2
11	Do you receive laboratory examination for free?	Yes.....1 No.....2
12	Do you pay for maternity care (normal and caesarean delivery)? If No, ignore question 16	Yes.....1 No.....2
13	Do you receive free medical care when sick	Yes.....1

	during pregnancy?	No.....2
14	Do you receive free scan services?	Yes.....1 No.....2
15	Did you know your insurance package covers you baby for the first 3 months of life?	Yes.....1 No.....2
16	Do you know you have unlimited health care covered by your insurance?	Yes.....1 No.....2
BARRIERS OF AWARENESS OF NHIS BENEFIT PACKAGE FOR ANTENATAL CARE SERVICES		
17	Do you buy most of the drugs prescribed by your physician?	Yes.....1 No.....2
18	Does the poor attitude of the health personnel hamper you from accessing full benefit of NHIS?	Yes.....1 No.....2
19	Do you think long queues in NHIS accredited health facilities prevents you from accessing the full benefit of being an NHIS card bearer	Yes.....1 No.....2
20	Doctors are most times not available to attend to my child	Yes.....1 No.....2
GAPS IN ACTUAL BENEFITS Kindly indicate the obstetrics and gynecology services you enjoy under the NHIS		
21	Manual Removal of Placenta	Yes.....1 No.....2
22	Instrumental delivery	Yes.....1 No.....2
23	Destructive Delivery	Yes.....1 No.....2
24	Caesarean Section	Yes.....1 No.....2
25	Spontaneous Vaginal Delivery with or without Episiotomy	Yes.....1 No.....2
26	Post Partum Haemorrhage	Yes.....1 No.....2
27	Eclampsia	Yes.....1 No.....2
	Kindly indicate the laboratory services you enjoy under the NHIS	Yes.....1 No.....2
28	Haemoglobin Electrophoresis	Yes.....1 No.....2
29	Haemoglobin Estimation (HB)	Yes.....1 No.....2
30	Glucose-6-Phosphate Dehydrogenase	Yes.....1

	(G6PD)	No.....2
31	Routine Stool Examination	Yes.....1 No.....2
32	Routine Urine Examination	Yes.....1 No.....2
33	Full Blood Count FBC (Automation)	Yes.....1 No.....2
34	Sickling Test	Yes.....1 No.....2
35	Blood Grouping	Yes.....1 No.....2
36	Ultrasound	Yes.....1 No.....2
37	Veneral Disease Research Laboratory (VDRL)	Yes.....1 No.....2
38	Retroscreen	Yes.....1 No.....2

Appendix B: Interview guide

1. Respondent code
2. Date of birth (month, year) Age
3. Religion
4. Educational Background
5. Employment status
6. Occupation
7. Are you currently insured with the NHIS?
8. What is your understanding about the design of the NHIS? How does the NHIS work in your opinion
9. Can you describe your understanding of the free maternal health policy
10. Do you know the entitlements in the free maternal policy (i.e. what services you are supposed to enjoy in the policy)
11. Do you know or are you aware of your rights to these entitlements?
12. Are you able to prompt the service provider about services that the law says it should be free but you are allowed to pay for?
13. Do you receive all these services for free?
14. Which services do you not pay for?
15. Which services do you pay for (or did you pay for)
16. What are some of the reasons that providers give for asking you to pay for services that are supposed to be free?

SECTION 2- Interview guide for service providers.

1. Respondent code
2. Department of respondent
3. How have you worked at Lekma hospital
4. Do you provide your clients (i.e. pregnant women) education on health insurance?
5. Do you provide client explanations on the free maternal policy
6. Do you explain to clients the services they are entitled to for free?
7. Are you able to provide these services free of charge to clients?
8. Which services are you able to provide for free?
9. Which services are you not able to provide for free
10. What are some of the limitations to your ability to provide some of the free maternal services?