

UNIVERSITY OF GHANA, LEGON

SCHOOL OF PUBLIC HEALTH, COLLEGE OF HEALTH SCIENCES,

**COMPARATIVE STUDY OF COMMUNITY PERCEPTION OF QUALITY OF
CARE WITH THE INCEPTION OF THE NATIONAL HEALTH INSURANCE
SCHEME IN THE KASSENA NANKANA DISTRICT**

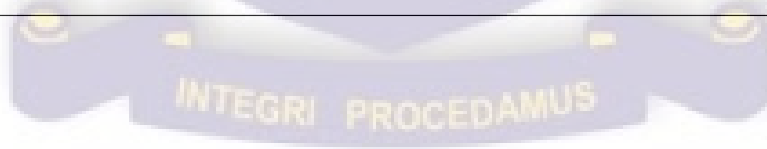
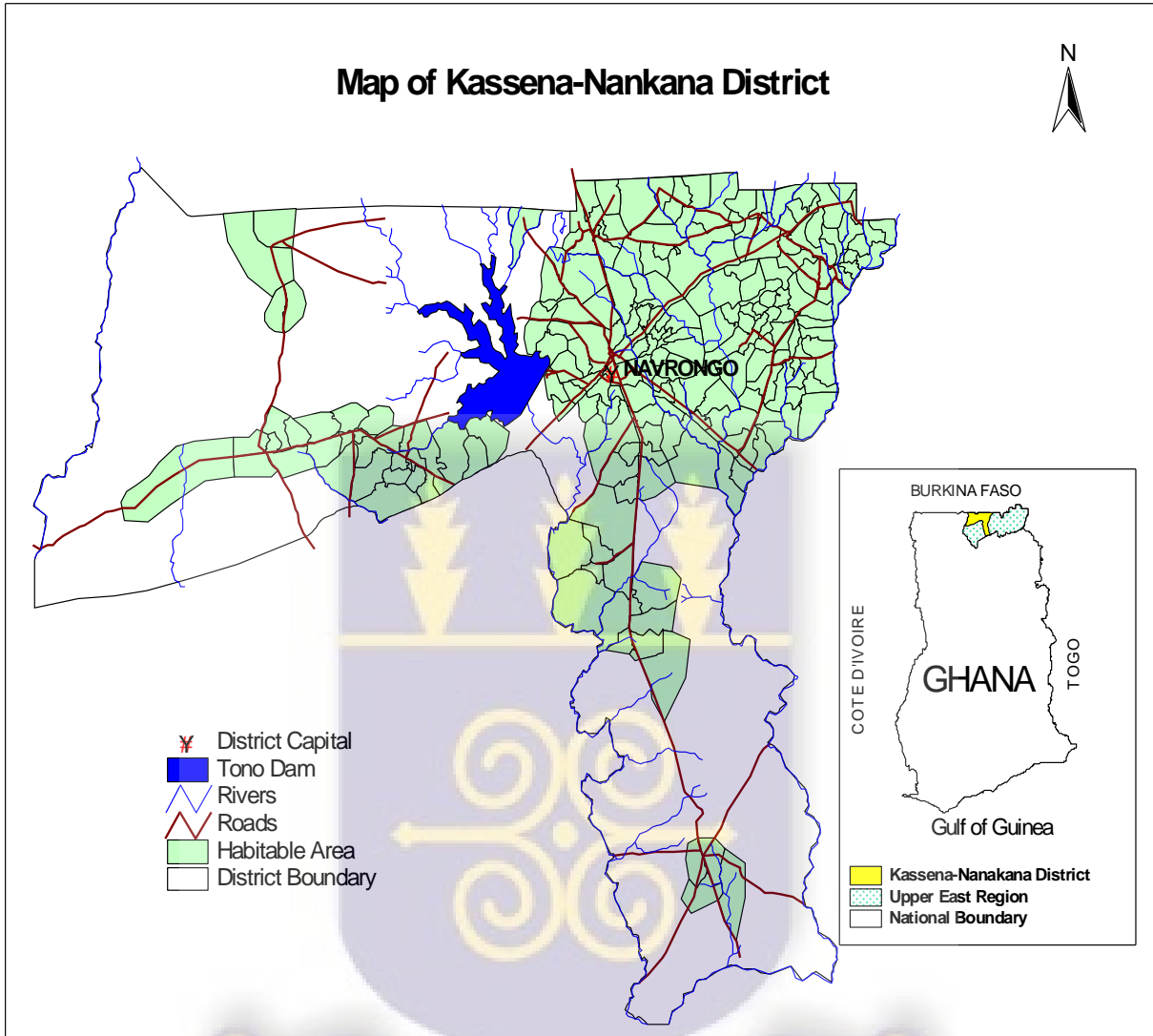
BY

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MASTERS DEGREE IN PUBLIC HEALTH (MPH) DEGREE**

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INTEGRI PROCEDAMUS



DECLARATION

I, Alirigia, Robert Awineboya, hereby declare that except for quotations and references to other works for which I have duly acknowledged and given credence, the work presented here is my own original research which has not been presented in any form elsewhere.

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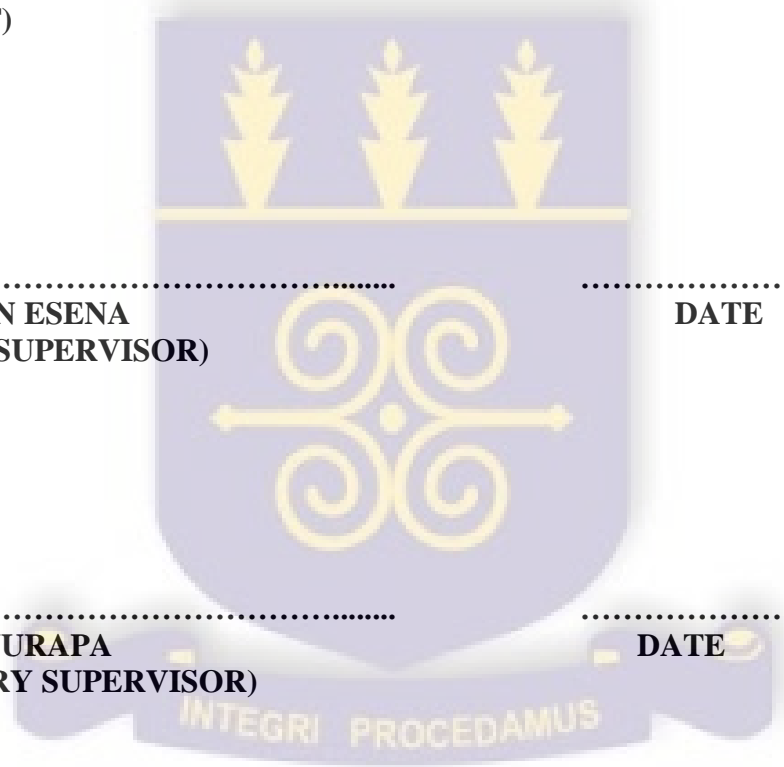
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DEDICATION

This work is dedicated to my parents Mr. Awineboya Alirigia and Akanyorige Awineboya, my wife Mary, my sons Raymond, Kenneth and Rex.



ACKNOWLEDGEMENT

All praise to the almighty God for his grace throughout the program.

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LIST OF ACRONYMS

- CAM** – Cart d'Assurance Maladie
- CBHI** – Community-based health Insurance
- CHF** – Community Health Fund
- CHI** – Community Health Insurance
- CHO** – Community Health Officer
- CHPS** – Community-based Health Planning and Services
- DHMT** – District Health Management Team
- FGD** – Focused Group Discussion
- IDI** – In-depth Interview
- IRB** – Institutional Review Board
- KND** – Kassena-Nankana District
- MHO** – Mutual Health Organization
- NDSS** – Navrongo Demographic Surveillance System
- NHIS** – National Health Insurance Scheme
- NHRC** – Navrongo Health Research Centre
- SHI** – Social Health Insurance
- SSNIT** – Social Security and National Insurance Trust
- WHO** – World Health Organization
- WTP** – Willingness to pay



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DEFINITION OF TERMS

Comparative – Relating to, based on, or involving comparison.

Community – Specific locality including its inhabitants.

Quality of care – a measure of the degree to which delivered health care services meet established professional standards and judgments of value by the consumer.

National Health Insurance Scheme – A health Insurance programme with nationwide coverage.

Social Health Insurance - a method for financing health care costs through a government supported program based on the collection of funds contributed by individuals, employers, and government subsidies.

Legislation – the process of making laws by parliament or law making body.

Health Service Act – A law enacted on a particular health related issue

Voluntary Health Insurance – Individuals coming out of their free mind to contribute towards financing health care costs.

Community-based Health Insurance – contributions towards financing health care cost at the community level.

Community-based prepayment – down payment at the community level towards an event or eventuality.

Out-of-pocket payment – involves direct payment.

Cross-subsidization - where one group (eg. Government) contributes a relatively high percentage of the cost with the individual contributing less.

Decentralization - distributing the administrative functions or powers of a central authority among several local authorities.

Informed consent form - a condition whereby a person is said to voluntarily give approval based upon an appreciation and understanding of the facts and implications of an action.

ABSTRACT

Introduction: Ghana implemented the National Health Insurance Scheme (NHIS) with the objective of increasing health insurance coverage in the country against the need to pay out-of-pocket at the point of service use. However with increasing utilization, anecdotal evidence suggests that community perception of health care is not overwhelmingly favourable.

Method: A cross sectional, comparative and exploratory study conducted in the Kassena-Nankana District (KND) of Northern Ghana to evaluate the community perception of the quality of care following the introduction of the national health insurance scheme. Both quantitative and qualitative methods were employed in the data collection and analysis.

Results: In general the results showed that both NHIS and non-NHIS clients perceive the health insurance scheme to be good (87.2% of those on NHIS and 89.7% for non- NHIS). There was a statistically significant difference in the perception of quality of health care between those who attended the hospital and those who attended health centres, as 95% of respondents who attended the hospital were less likely to perceive quality of care at the hospital as good compared to those who attended the Health Centres (OR =0.05, 95% CI: 0.025, 0.096), $p < 0.001$. The results also showed that NHIS clients were about 1.4 times more likely to perceive the quality of health care as satisfactory compared to non-NHIS clients. The difference was however not statistically different at 95% confidence level (OR =1.44, (95% CI: 0.79, 2.62), $p = 0.230$). Comparing perception before and during the implementation of the NHIS, results show that both NHIS and non-NHIS respondents at the health centres were satisfied with the quality of services with the implementation of the

NHIS, however both NHIS and non-NHIS respondents at the hospital were somehow dissatisfied with the quality of health care following the implementation of the scheme.

Conclusion: The general perceptions of the quality of health care at the health facilities in the Kassena-Nankana District by both NHIS and non-NHIS clients were said to be good. However, while the quality of health care at the health centre level was perceived by both NHIS and non-NHIS clients to have improved with the inception of NHIS, at the district hospital, the quality of care was perceived to be poor with the inception of the NHIS by both NHIS and non-NHIS clients.

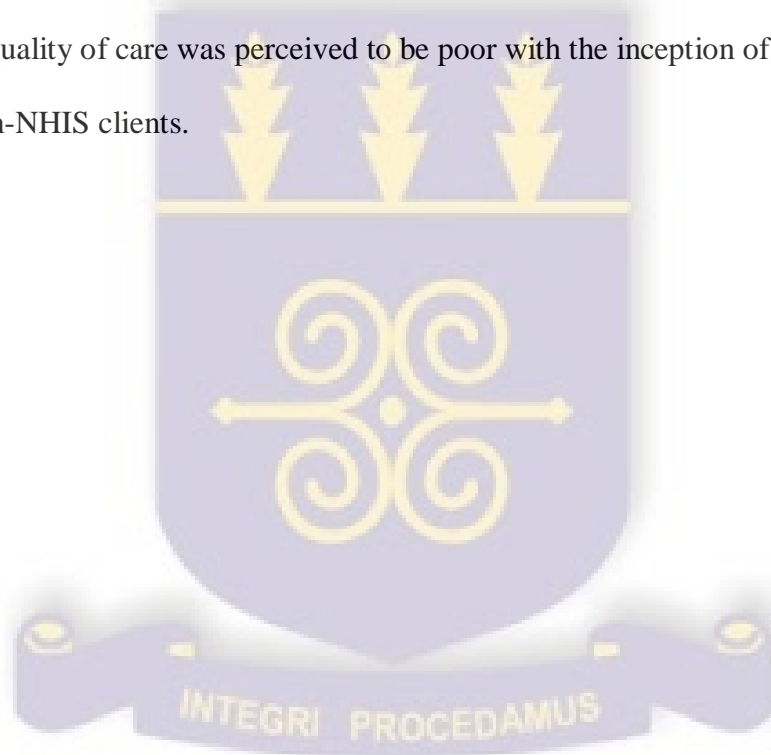


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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

Ghana implemented the National Health Insurance Scheme (NHIS) with the objective to have Ghanaians belonging to a health insurance scheme that adequately covers them against the need to pay out-of-pocket at the point of service use. This would enable them obtain access to a defined package of acceptable, quality health services. However with increasing utilization, anecdotal evidence suggests that a community perception of quality of health care is not overwhelmingly favourable.

The first Social Health Insurance (SHI) was introduced in Germany in 1883, when the government enacted legislation to provide mandatory health insurance. Originally it was applied only to benefit low-income workers and certain government employees, but gradually expanded to cover the entire population which was to guarantee access to high-quality comprehensive health care (Carrin and James, 2005). The British National Health Service Act of 1946 also established the socialised health-care system in 1948 as National Health Insurance to provide free medical care for all people regardless of income. This was followed by the Patient's Charters in 1992. The Patient's Charters listed the rights and service standards patients can expect including treatment within a specific time span, since long delays for treatment and elective surgery were among the main complaints about the system (Cook GC, 2004).

Increasing access to health care of African populations has been of concern to the global community or the world at large. During the 1980s and 1990s, health sector reforms intended to improve the efficiency of health systems and the quality of care were implemented by

African governments. In most African countries, these reforms in particular out-of-pocket fees that were paid at the time of illness brought about decreasing access to health care by the poor (Bethune et al, 1989; Booth et al, 1995; Nyonator and Kutzin, 1999).

Ghana for example has prioritised universal coverage of health care as primary outcome and has therefore put in place policies and programmes to meet this goal. Even though success has been achieved in different aspects of the health sector, health care delivery remains inadequate especially for poor people and other disadvantaged groups (Osei-Akoto, 2003).

The task confronting the health sector remains difficult; life expectancy at birth remains low (59 years), morbidity of preventable diseases remains high; malaria, diarrhoea and other preventable diseases account for about 40% of child mortality, and maternal mortality is still high, 560 per 100,000 live births and infant mortality rate (IMR) of 76 per 1000 live births¹ (UNICEF, 2007).

Several reasons including financing as a major one, account for the slow pace of improvement in the health sector in Ghana. The reduction of public spending on health care and the introduction of user fees created problems of inaccessibility and inequity in health care (Asenso-Okyere et al, 1998) and (Osei-Akoto, 2003).

To mitigate the effects of decreasing access to health care and dwindling public resources for health care provision, health insurance is seen as an alternative to direct out-of-pocket payments for health care.

¹ http://www.unicef.org/infobycountry/ghana_statistics.html#51

In poor African countries, individuals in the informal sector, regardless of their income, cannot access appropriate health care, particularly curative care, at the time of need.

Establishing national health insurance scheme and targeting households in poor communities such as villages or districts, is an option for providing immediate financial risk protection to a significant number of households. It will also offer a potential for eventually achieving universal coverage and high cross-subsidization between high and low income households in the future.

Different types of voluntary health insurance became widespread in Africa and Asia called community-based health insurance (CBHI). These schemes were also called mutual health insurance, community-based prepayment schemes, community health funds or micro-insurance (Bennett et al., 1998).

In West Africa, health insurance schemes, which are either community-based or national, are rapidly increasing. In Ghana the number of mutual health organizations (MHOs) increased from 47 in 2001 to 168 in 2003 to make health care accessible and provide quality care (Baltussen et al, 2006).

The first community health insurance (CHI) scheme in Ghana was the Nkoranza health insurance scheme which was started by the St Theresa Catholic Mission Hospital in 1992 (Agyepong and Adjei, 2008).

In August 2003, the government of Ghana passed the National Health Insurance Act with the primary goal to improve access and quality of basic health care services through the establishment of district-level mutual health organizations (MHOs) or district-wide health

insurance schemes. The objective of the policy was to have Ghanaians belonging to a health insurance scheme that adequately covers them against the need to pay out-of-pocket at the point of service use to enable them obtain access to a defined package of acceptable, quality health services (Government of Ghana, 2004). The National Health Insurance Scheme (NHIS) policy in Ghana stated that informal sector workers (self employed) would pay between a minimum rate of GH¢7.20 to a maximum rate of GH¢48.00 to register to enable them receive healthcare coverage. Social Security and National Insurance Trust (SSNIT) contributors in Ghana are entitled to the minimum health care benefit without further contribution in premium. A spouse of a SSNIT contributor who is not a SSNIT contributor must pay premium set for the informal sector. Children less than 18 years of age whose parents or guardians have registered with the NHIS are not required to pay premiums and would obtain coverage when they register. Pensioners under the SSNIT Scheme, persons 70 years or above or indigents are exempted from payment of contributions and should register to enjoy NHIS benefits. People could access services within 6 months after registration. Primary care services that constitute about 95% of cases reported in Ghanaian healthcare institutions are covered, so are their related drugs for their treatment as specified on NHIS Drug List. NHIS members are allowed to access services outside their district scheme. The NHIS package does not include specialist care such as cancers (except cervical and breast cancers) and dialysis for chronic renal failure, etc. Services covered under government vertical programs (immunization, family planning, etc.) are not covered and drugs not listed on the NHIS Drug List are not covered. Over-the-counter medications and supplies prescribed by NHIS accredited providers must be supplied by NHIS accredited chemical stores or pharmacies only. There is no limit to what NHIS pays in medical bills as

long as the care is within the provision of the benefit package. There are no co-payments, co-insurance, or deductibles. Not accessing services for a period of time does not affect ability to access future services. One of the principles of the NHIS is the healthy subsidizing the sick so that the necessary pool of fund can be created. There are no refunds or rebates to contributors if they are not accessing services. In 2007 it was estimated that about 11,000,000 people in Ghana making about 47% of the total population were registered and NHIS card bearing clients could access health care (Allison.2007).

In the Kassena-Nankana District, the National Health Insurance Scheme was launched in November 2005. By the end of 2007 a total of 59,205 people had fully registered forming about 40% of the population and total hospital attendance (new and revisits) in 2007 was 56,370 with NHIS clients forming 80%. Hospital attendance in 2004 before the National Health Insurance Scheme was 34,648 thus showing an increase in hospital attendance in 2007.

Patients' perceptions are increasingly used to measure quality of care in a diversity of health-care delivery settings (Rosenthal and Shannon, 1997).

This study compared the perceptions of National Health Insurance scheme (NHIS) clients and non National Health Insurance scheme (NHIS) clients on the quality of health care at the health facilities with the inception of the Health Insurance Scheme. It also compared their perceptions before and with the implementation of the NHIS.

1.2 PROBLEM STATEMENT

Ghana has had a chequered health care financing. Before independence there were user fees at the point of health care access. After independence health care became free and financed through general taxes and donor support. Token user fees were reintroduced in the 1970s. In the 1980s significant user fees known as “cash and carry” was introduced at the point of access. These various reforms did not bring in the needed resources to the Ghanaian health sector and the health sector became poorly resourced.

There was stagnation of Ghana’s economy in 1972 followed by a decline in almost all its economic indicators, with the health sector seeing widespread shortages of essential medicines, supplies and equipment, and poor quality of care (Agyepong and Adjei, 2008). The inception of the National Health Insurance Scheme (NHIS) has in several ways contributed to increased access of health care by many people and anecdotal evidence has shown that this has brought about increase in health facility attendance. Yet there has not been any commensurate increase in staff or personnel and equipment. However with increasing utilization, anecdotal evidence suggests that community perception of health care is not favourable. There were negative community perceptions about the quality of the health care at the health facilities (Kassena-Nankana DHMT, 2006).

The public perception of the quality of care at health facilities is a motivational factors that informs peoples’ choice in their seeking of health care. For example, it is known that factors such as patients, their relations, the medical staff, the nursing staff, convenience, and technology are important in the public's perception of quality (Boscarino, 1996).

The aim of this study was to document and compare the perceptions of National Health Insurance scheme (NHIS) clients and non National Health Insurance scheme (NHIS) clients

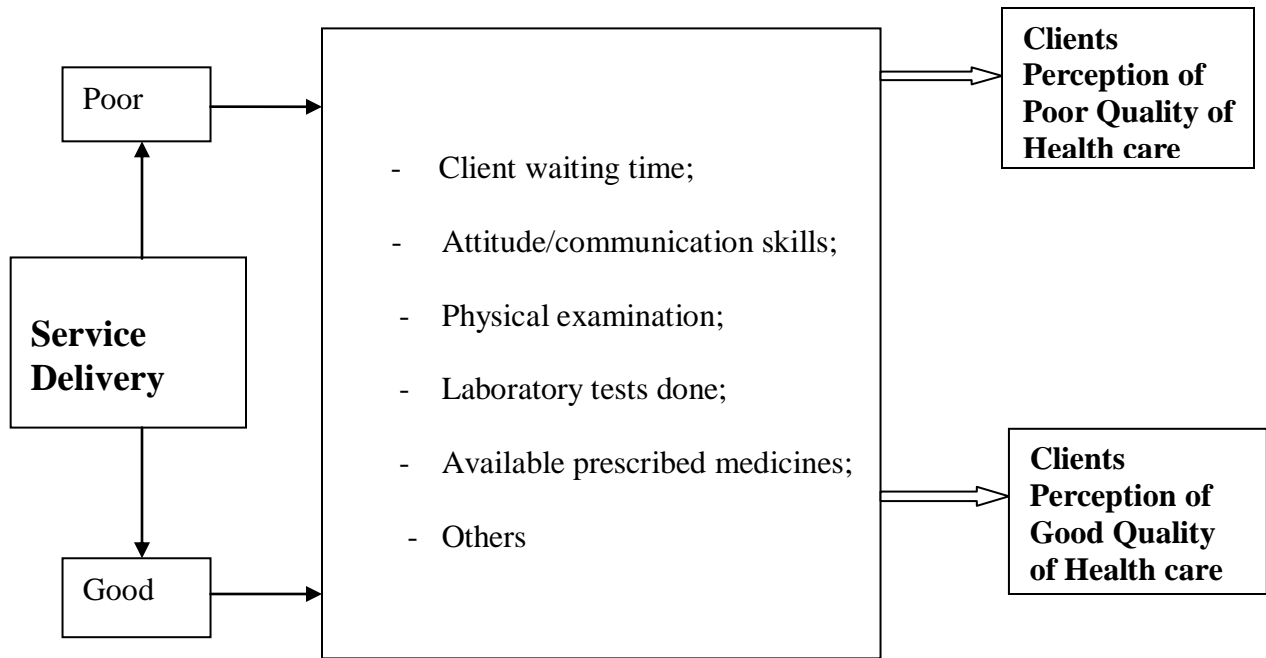
on the quality of health care at the hospital and other health facilities amongst the community members with the inception of the National Health Insurance Scheme in the Kassena-Nankana district of northern Ghana.

CONCEPTUAL FRAME:

The factors stated below enabled me use the variables derived to determine the perception of quality of health care. The main factors were waiting time, staff attitude and communication skills, availability of prescribed drugs, physical examination and laboratory tests.

Figure 1 show the relationship between services delivered, the main factors and perceived quality of care. Poor or good service delivery affects the identified factors, which affects the clients' perception (poor or good) quality of care.

Figure 1: Conceptual Frame of Perceived Quality of Care



1.3 JUSTIFICATION

Between 1997 and 2003 Core Welfare Indicators Questionnaire (CWIQ) survey in Ghana showed that the percentage of people stating that they had access to health facility increased from 37% to 58% ²(CWIQ Survey 1997/8).

Patients' perceptions about health services seem to have been largely ignored by health care providers in developing countries. Such perceptions, especially about service quality, might shape confidence and subsequent behaviours with regard to choice and usage of the available health care facilities (Andaleeb, 2001).

With the inception of the National Health Insurance Scheme (NHIS) anecdotal evidence/health facility records showed that there was increased attendance for health care at the health facilities. However with increasing utilization, anecdotal evidence suggests that community perception of health care is not overwhelmingly favourable.

Since the inception of the NHIS in 2005 there has not been much study on the quality of health care at the health facilities as perceived by the clients or patients. The perception of the quality of care with the inception of the NHIS in Ghana would assist the NHIS management and health providers to address some of the issues that might result in low registration and utilisation of the health services. The findings of this study would provide the platform for further future research. Finally, the perceptions of the quality of care with the inception of the NHIS as perceived by clients within a rural setting such as the Kassena-Nankana district have not been well documented.

The study therefore sought to address the key gaps identified and make recommendations for policy makers both at the district and national levels.

²<http://www4.worldbank.org/afr/stats/pdf/ghcoreinds.pdf>

1.4 OBJECTIVES

1.4.1 GENERAL OBJECTIVE

The general objective of this study was to compare community perceptions of the quality of health care with the inception of the National Health Insurance Scheme (NHIS) in the Kassena-Nankana District.

1.4.2. SPECIFIC OBJECTIVES

The specific objectives of this study were to:

1. Determine the perceptions of quality of health care of National Health Insurance Scheme (NHIS) clients.
2. Determine the perceptions of the quality of health care of non National Health Insurance Scheme (NHIS) clients.
3. Compare the perceptions of NHIS clients and non NHIS clients on the quality of health care.

CHAPTER TWO

2.0 LITERATURE REVIEW

The literature review focused on user fees and quality of health care, health insurance and quality of care, and quality of health care as viewed by patients and health providers. This included perception of/and quality of health care related to waiting time, patient informed of diagnosis, attitude of health personnel, drug availability and instructions on medication.

At the time of ill health, African households do not have alternatives to mechanisms that they will use to obtain health care. The uncertainty about the timing of illness, the unpredictability of health care costs during illness, and the low and irregular income of individuals make it almost impossible for households to make financial provision for illness-related expenditures. User fees therefore constitute a major part of such expenditures. As a result, user fees have been, and still are, a major contributing factor to the high out-of-pocket payment by individuals and households at the time of illness. Therefore, user fees have contributed considerably to increasing the exposure of poor households to financial risks associated with illness (Arhin-Tenkorang, 2001).

Several reasons including financing as a major one, account for the slow pace of improvement in the health sector. The reduction of public spending on health care and the introduction of user fees created problems of inaccessibility and inequity in health care (Asenso-Okyere et al., 1998) and (Osei-Akoto, 2003).

It is believed that health investments that make preventive health care available will lead to improved health and productivity of the people, and consequently lead to higher incomes. The provision of access to curative health care is necessary to reduce income shocks from illness that might otherwise push people into poverty. In contrast, because households could not treat severe malaria, society considers accessible treatment of this disease a high priority among the functions expected of the health system (Arhin-Tenkorang, 1995).

Health insurance schemes are increasingly recognised tool to finance health care provision in low-income countries (WHO, 2000). Given the high potential demand for good health care services and the extreme under-utilization of health services in several countries, it has been argued that health insurance may improve the access to health care of acceptable quality (Jütting, 2005).

According to (Ekman, 2004) there is weak or no evidence that health insurance schemes have an effect on the quality of care or the efficiency with which care is produced.

At any health facility, clinic or hospital the medical care provided is aimed to improve the health status of the patient or client and also to respond to their needs, their demands, wishes or perceptions and to ensure that their care is satisfactory (Donabedian, 1988). According to (Ballard et al, 2004) the quality of health care in any health facility is aimed at providing care that is safe, timely, effective, efficient, equitable, and patient centred.

Where health care at a health facility including consultation, laboratory service and pharmaceutical services are decentralised, will be considered the potential for improved service quality and coverage (Prata and Montangu, 2005).

Health services have become a health market which would be demand driven and health providers need to learn how to improve the quality of health care in order to effectively satisfy the needs and desires of their patients. The culture is therefore consequently shifting from emphasising the efficacy and effectiveness of care outcomes to adapting services in response to patient needs (Donabedian, 1996; Williams, 1994).

With health insurance in place it is hoped that there will be improved health care and bring about increased quality of care. In recent times, health care providers and policymakers are increasingly using patient satisfaction measures to assess the performance of health care organizations (Hibbard and Jewett 1996 and Zaslavsky et al. 2000). Patient satisfaction in any health facility is important because it leads to a higher rate of patient retention, continuous utilisation of services and customer loyalty (Nelson et al, 1992). It also influences the rates of patient compliance to instructions, return for reviews and with physician counselling (Calnan, 1988; Roter et al, 1987).

The measurement of patient perceptions constitutes a positive approach to the evaluation of quality, in contrast to negative approaches that focus on the measurement of inadequate processes or undesired outcomes. It has been acknowledged that compared with other methods of evaluating quality, assessment of patient perceptions offers several practical advantages (Haddad et al, 2000).

Health care packages to clients receiving services at health facilities including consultations, laboratory tests and prescribed drugs will be such as give the patients or clients the needed satisfaction with improved quality of care that would lead to positive health outcomes (Arhin-Tenkorang, 2001). Patient satisfaction has also found a linkage between satisfaction and hospital utilization. Where there is high quality of health care with patient satisfaction this has lead to increased hospital or health facility utilization (Ware et al, 1978).

2.1 WAITING TIME:

Waiting time is one of the factors that patients or clients seeking health care at the health facilities, clinics or hospitals would wish to reduce. Long waiting time might therefore be perceived as a cause of unsatisfactory service to patients or clients. Health providers therefore need to look at possible ways that will reduce the periods of waiting and institute measures that will improve the quality of the service in relation to waiting time. According to (Rondeau, 1998), it is believed that unorganized patient flow processes will increase waiting time and as a result decrease patient satisfaction.

In a study conducted in the United States of America, on 1,789 ambulatory care facilities, patient satisfaction with out-patient care was said to be influenced strongly by the amount of time the patient spent waiting for care (Leddy et al, 2003). Similarly a study that was conducted in an urgent or emergency unit at a care department of the Pennsylvania State University medical care in the United States of America evaluated 323 patients and found that the most important was the total time patients spent waiting to see the physician (Dansky and Miles, 1997).

Patients consider the time spent waiting to see the doctor or physician as against the time they spend with the doctor or physician during period they are being seen. Time spent with the physician is perceived as a feature in patient satisfaction for improving the quality of health care where as long waiting time to see the doctor or physician is perceived an unsatisfactory patient feature for improving the quality of health care (Leddy et al, 2003). Bringing about quality improvement efforts could be ways that are helpful to overcoming the barriers to effective patient flow by decreasing patient waiting time, and improving the efficiency of care (Potisek et al, 2007). According to (Anderson et al, 2007), the time spent with the physician can be considered a stronger predictor of patient satisfaction than the time spent in the waiting room. He is therefore suggesting that shortening patient waiting times at the expense of time spent with the doctor will improve patient satisfaction scores which will be counter-productive.

With the inception of the national health Insurance scheme patients or clients are expecting that they would be provided with satisfactory, improved quality care service at the health facilities, clinics or hospitals. According to (Akazili et al, 2005), community members who have contributed towards a health insurance scheme are now expecting more fairness, some respect, and dignity from health personnel and shorter waiting time.

2.2 LABORATORY TESTING AND DIAGNOSIS

Due to the poor systems in developing countries many things are lacking including diagnostic equipment and materials. It has been observed that, in many developing countries,

weak health systems as well as lack of equipment and qualified staff lead to incorrect diagnosis and treatment at health facilities (Font et al, 2001 and Nsimba, 2002)

The purpose of the laboratory is to analyze clinical laboratory specimens and pass on the information to the appropriate healthcare provider in a timely manner. The impact that the laboratory has on patient care is enormous and this contributes to the quality of health care at the health facility, clinic or hospital (Kurec, 2006).

Clinical laboratory tests and diagnoses have an effect on the vast majority of treatment decisions made by clinical physicians in nearly every medical discipline, impacting nearly every person seeking medical care and improving the quality of care (Dahl, 2006).

The majority of diagnostic determinations and the succeeding interventions provided to the patients are dependent upon laboratory test results. Delayed specimen collection leads to delayed processing, which leads to delayed treatment. Having the latest and greatest technology in laboratory equipment is practically useless if we continue to have poor response time to the unit for specimen collection. To ensure good quality and for most patients to receive the best possible care and achieve best possible outcomes, specimens should to be collected sooner rather than later so that the appropriate treatment can be initiated (Wyche, 2006).

Providing accurate laboratory results is essential for appropriate diagnosis. Most therapeutic or treatment decisions are based on the presumed reliability of diagnosis, and as such a misdiagnosis could result in unnecessary, harmful and not helpful therapy, or inadequate or poor treatment (Dahl, 2006).

It is believed that each patient should be treated as an individual whose laboratory testing forms an integral part of his or her total medical care. Provision of the state-of-the art testing, integrated medical records, consultation, and outstanding customer service, all contribute to the quality, access, continuity, and cost-effectiveness of patient care^{3†}.

When patients are given prompt treatment with individualized drug regimens based on drug susceptibility test, it improves patient outcomes (Telzak et al, 1995) and according to (Park et al, 1996 and Jindani, 1980) this reduces the risk of amplification of drug resistance and ongoing transmission.

When patients gained knowledge about their diagnosis, procedure, or treatment, their personal anxiety and tensions lessened and communication with the health care team improved (Tarby et al, 1997).

2.3 ATTITUDE OF HEALTH STAFF/COMMUNICATION SKILLS

The interpersonal relationship between health providers and patients is very important in determining perception of satisfaction of their health care. The perceived quality of the doctor-patient relationship could, in the long run, come out as the most significant factor in bringing about patient satisfaction and loyalty (Cho et al, 2004).

Patients' perceived caring behaviours and attitudes as indicative of quality care. As such the way to bridge the gap between institutions' and patients' perceptions of quality care lies in

³ † <http://www.griffinhealth.org/PatientVisitor/PatientServices/Laboratory/Default.aspx>, 2008

valuing the interactions that patients consider quality care and including these interactions in measures of quality care (Williams, 1998).

An effective consultation and good patient-doctor interaction during health care delivery requires uninterrupted privacy and undivided attention to the patient (Rhoades et al, 2001).

The way the doctor, nurse or health worker communicates to a patient could be a source of worry or satisfaction to the patient. According to (Teutsch, 2003), communication problems or not good interpersonal relationship between the patient and the provider could be grounds for difficulties in the effective delivery of health care.

In about 50% of the consultations, the doctors paid full attention to the patients and emphasized verifying their understanding, while this was the case in less than 25% of the nurses' consultations (Abdulhadi et al, 2006)

It has come out that at hospitals the healthcare system suffers vast inefficiencies because of the poor quality of communication systems that are often in place (Coiera, 2006)

It has been observed that nurses do not have much time to sit down and listen to their patients. On the other hand listening to their expressions, talking about their conditions, family and disease courses can advance patient's spiritual status and reduce patient's stress (Negarandeh et al, 2006)

At a health facility, clinic or hospital, the quality of a good care system should have a good nurse-patient relationships at both out patient and ward to operate harmoniously and provide

patient satisfaction, thus making daily life together bearable and reasonably smooth (Bowers et al, 2000).

With HIV/AIDS rising in its spread (Melby et al, 1992) found that nurses and other health workers are more terrified of nursing or caring for HIV/AIDS patients and as such are more liable to refuse to care for HIV/AIDS patients in the face of even the availability of appropriate equipment.

The way alcoholics are perceived, may be due to the way they behave or probably might be smelling of alcohol and health workers tend to behave indifferently towards them. It has been observed that nurses tend to have negative attitudes toward people with alcoholic problems. As such it can influence the quality of healthcare provided to this group of patients. In that regard, alcoholic patients may not be properly treated (Chung et al, 2003). Nurses caring for personality disordered patients have also been observed to run the risk of not being in favour of such moral practices and thus rejecting patients bearing such diagnosis, distancing themselves from them, and considering them illegitimate users of health service resources (Bowers et al, 2000).

Health workers have similarly certain attitudes towards the elderly. It is said that nurses with positive attitudes toward older people are believed to have many negative stereotypical, ageist attitudes about the elderly. Some of these negative attitudes by the nurses are believed to have a significant impact on the quality of care given to these older patients. For instance if for any reason, the older patients are perceived as uncooperative and complaining, then

their requests to nurses may not be taken seriously impacting on the care they receive, the length of their hospitalization and their recovery (Courtney et al, 2000).

(Noak, 1995) therefore argues that a good nurse-patient relationship will enable the nurse to become an advocate of the patient, and allows the nurse to get to know the patient well thus developing empathy. He also argues that a good relationship allows the patient to become engaged with and committed to therapy, and provides interpersonal continuity and stability and thus perceived as improved quality of care.

2.4 CLINICAL EXAMINATION

Patients might psychologically see physical examination as part of the care they receive when they report of a health problem at the health facility and may perceive the absence of it as poor quality of care. The basic physical examination practiced included history taking, inspection, palpation, and direct auscultation thus enabling clinicians to detect signs that will aid them in their diagnoses (Roelandt, 2003). Clinical examination procedures have emerged as individual clinicians attempted to improve on their ability to accurately diagnose illnesses and injuries. The clinical examination findings therefore influence treatment and referral decisions and permit prognostication regarding outcome after one or more courses of treatment (Denegar and Fraser, 2006).

2.5 AVAILABILITY OF PRESCRIBED DRUGS

With the inception of the National Health Insurance Scheme an essential drug list has been agreed upon to be prescribed and be available at the health facilities, clinics or hospitals

(Ministry of Health, 2004). The lack of prescribed drugs in a health facility could be perceived as poor quality of care. The unavailability of drugs or absence of medicines and long waiting hours at the health facilities are some of the reasons that patients obtain their medicines from private pharmacies and dispensing doctors (Babar et al, 2007).

In a study in Malawi, it was observed that essential drugs especially those used for treating malaria and pneumonia in public health facilities were out of stock for months during one year of observation; anti-malarial drugs were lacking for periods ranging from 42 to 138 days and Benzyl penicillin was in shortest supply. The main reason for the shortage of drugs was insufficient deliveries from the Regional Medical Store (Lufesi et al, 2007)

In Malaysia, free market economy is practiced with a price deregulation system in which manufacturers, distributors, and retailers set medicine prices without government control. A study in Malaysia showed that medicine prices have been reported to escalate even faster than prices in the developed world. As such in the public sector, median availability of medicines were very low, and only 25% of the generic drugs were available (Babar et al, 2007).

Improving drug availability, interpersonal skills (including attitudes towards patients) and technical care have been identified as the three main priorities for enhancing perceived quality of primary health care and health policy action (Mashego and Peltzer, 2005).

2.6 GAPS IN THE LITERATURE

Most of the literature reviewed focused on measured quality of care with not much published data on perceived quality of care. Since the inception of the NHIS in 2005 there has not been much study on the perceptions of quality of health care at the health facilities. Yet anecdotal evidence suggests that community perception of health care is not favourable.

The perception of the quality of care with the inception of the NHIS in Ghana would assist the NHIS management and health providers to address some of the issues that might result in low registration and utilisation of the health services. The findings of this study would create the platform for more future research. Finally, the perceptions of the quality of care with the inception of the NHIS within a rural setting such as the Kassena-Nankana district have not been well documented.

The study therefore sought to address the key gaps identified and make recommendations for policy makers both at the district and national levels.

CHAPTER THREE

3.0 METHODOLOGY

3.1 TYPE OF STUDY

This study is a cross sectional, comparative and exploratory study, and both quantitative and qualitative methods were employed. The quantitative aspect of the study was carried out with patients exiting the health facility or hospital after treatment using a structured questionnaire. A qualitative aspect consisting of In-depth Interviews (IDIs) with the heads of the health facilities or health providers and Focus Group Discussions (FGDs) with men and women in the community who have either enrolled with NHIS or not. Participants for the qualitative study (FGDs) were sampled using the NDSS database. Both the quantitative and qualitative methods provided different techniques to answer the objectives of the study.

3.2 STUDY LOCATION

Study Site

The study was conducted in the Kassena-Nankana district, in the Upper East region of Ghana. The district lies between latitude 10°30' and 11°00', and longitude 1°00' and 1°30' within the open woodland, sub-Sahel region of West Africa. The district stretches over an area of 1,674 square kilometres. It has a short rainy season with an annual rainfall average of 850 mm, with most rain falling during June to October. The dry season lasts from November to May, with the harmattan winds peaking in January and February. The temperature ranges from 20°C to 40°C.

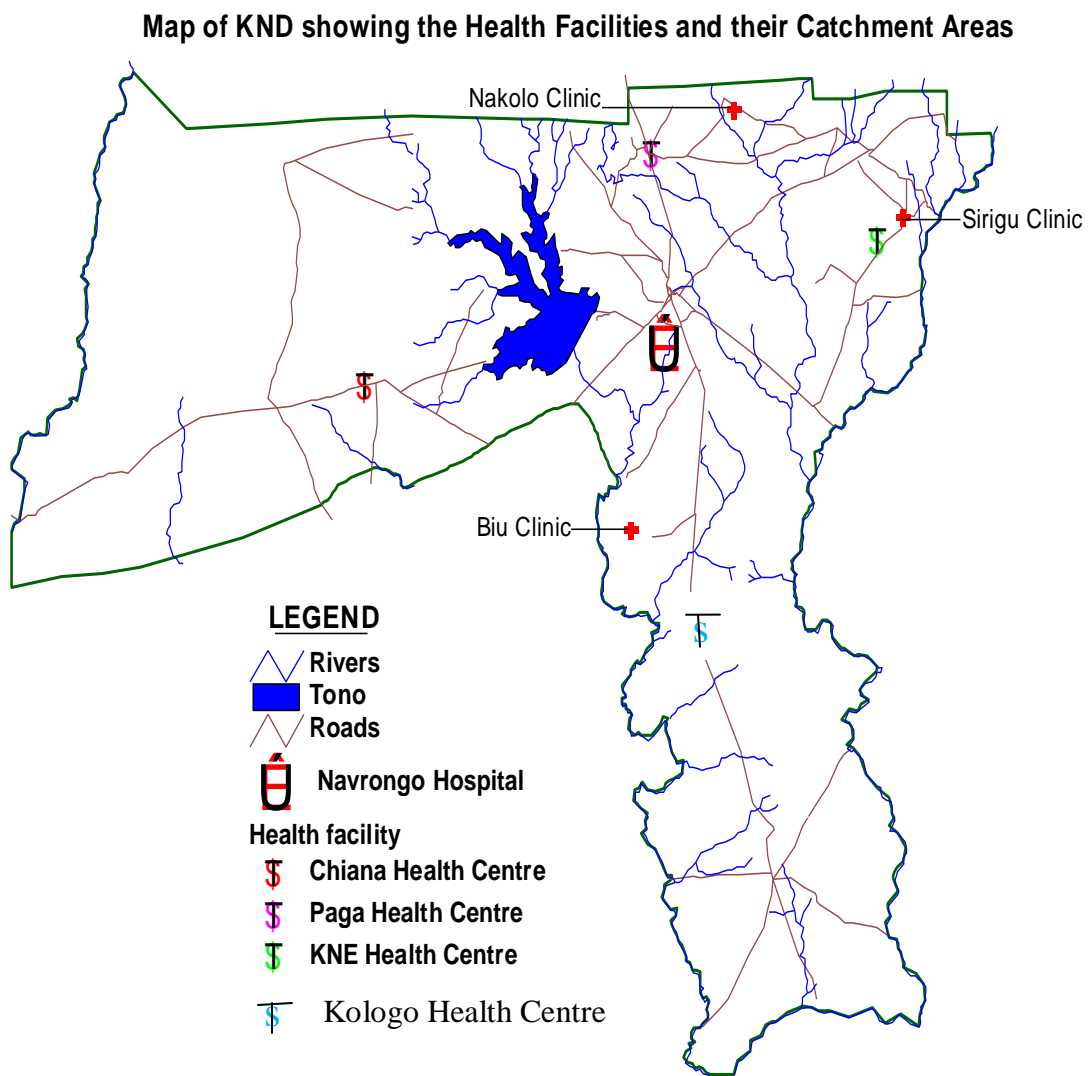
The Navrongo Demographic Surveillance System (NDSS) of the Navrongo Health Research Centre is used for monitoring vital events in the Kassena-Nankana District. The NDSS involves tracking community members over time and has been operating in the district since 1993. The area is divided into five zones, and within each zone compounds are grouped into clusters. The district contains 247 clusters with 16,376 compounds.

The district has a population of 147,536 (NDSS, 2007) who mainly live in rural areas apart from those living in central Navrongo. There are two main ethnic groups in the district: the Kassenas who comprise 54% and the Nankanis, who make up 42%, and the others who make up 4%. Agriculture is primarily for subsistence with the main crops being millet, sorghum, rice and groundnuts. Other occupations include petty trading and animal husbandry, but no larger scale industries exist within the district.

The Tono irrigation project, which is situated in the district, irrigates an area of 36 square miles and several small dugout dams provide water to the people and their livestock especially during the dry season when most of the riverbeds have dried up.

The district has a district hospital located in Navrongo (administrative capital) that serves as a referral point for the Kassena-Nankana district, the Builsa district and neighbouring towns in Burkina Faso. There are five health centres, and three community clinics jointly run by the Catholic Diocesan Development Office and the District Health Administration that provide services to the communities. There is one private clinic and 27 functional Community-based Health Planning and Services (CHPS) compounds with resident Community Health Officers (CHOs) offering doorstep services.

Figure 2: Map of Kassena-Nankana District showing Health Facilities



3.3 STUDY POPULATION

The study population for the quantitative survey were patients attending the health facilities for health care in the Kassena-Nankana District. The study population for the qualitative study were made up of In-Depth Interviews (IDIs) of heads of the health facilities and Focus Group Discussions (FGDs) with community members who were selected from the study area.

3.4 SAMPLE SIZE

3.4.1 Exit Interviews

The sample size for the exit interviews was calculated using EPIINFO Version 6 (statistical) software. The population of the Kassena-Nankana District is 147,536 under surveillance by the NDSS and the registered members with the national health insurance scheme as at the end of 2007 was 59,205 forming about 40% of the population. Total hospital attendance for the year 2007 was 56,370 forming about 50% of 2007 OPD health facility attendance. Using an expected frequency (percentage perceived to have received quality care) of 50% and the worst acceptable frequency ($\pm 5\%$ of expected freq) at 95% confidence level, the calculated sample size was 383. However a total of 406 participants were interviewed to make up for non response. Two hundred participants were interviewed from the four health centres and two hundred and six participants from the district hospital.

3.4.2 In-Depth Interviews (IDIs)

Five in-depth interviews (IDIs) were conducted with the heads of health centres and administrator of district hospital.

3.4.3 Focus Group Discussions (FGDs)

Twelve focus group discussions (FGDs) were conducted with two kassem communities, two nankam communities and two central Navrongo communities grouped in NHIS and non-NHIS

3.5 SAMPLING METHOD.

3.5.1 Sampling Process

The Kassena-Nankana District has a functional demographic surveillance system called the Navrongo Demographic Surveillance System (NDSS) which has been in operation since 1993. The NDSS is updated every 4 months. All the samples used in this study were drawn from the NDSS database. All respondents in the exit interviews were identified using their compound numbers in the NDSS and discussants were identified using their compound and personal identification numbers in the NDSS

Hospital attendance constituted about 50% of the total district OPD attendance in 2007. Thus the sample size was proportionately apportioned as 50% exit interviews at the hospital (206 participants) and 50% at the four health centres (200 participants) – North, East, West and South (50 participants each).

Participants or respondents for the exit interviews were community members who attended the health facilities (health centres or hospital). A structured questionnaire was used to administer the interviews to the respondents which lasted about 15 minutes. The exit interviews were conducted on different days of the week and on the major market days that allowed representation of the district especially the rural people. A systematic sampling of every 5th and 10th client (at health centres and hospital respectively) was identified when they registered in the morning at the Records department, who were then interviewed when exiting. The observation was that most of the patients who attended the health facilities were females with those on NHIS forming the majority. Due to the limited time required to collect the data there was therefore purposive attempts that ensured reasonable males and non-NHIS respondents were included in the exit interviews as they were fewer. The Kassena-Nankana district has one government hospital and five health centres located in the five zones of the district. The health centre at the Central zone currently does not provide clinical services. The exit interviews were carried out in the four health centres providing clinical care as well as the district hospital with both NHIS and non-NHIS clients.

The IDIs were purposively carried out with all the four heads of the health centres and the Administrator of the district hospital.

For the FGDs, random cluster sampling was employed in selecting FGDs participants using the Navrongo Demographic Surveillance System (NDSS). The North zone was randomly selected from among the Kassem speaking zones (the North and West zones), the East zone was selected from the Nankani speaking zones (the East and South zones) and the Central

zone was purposively selected due to the location of the hospital. Two clusters within the selected zones were further randomly selected and a list of 50 adult males and 50 adult females randomly selected in each of the selected clusters from the NDSS. The listing of the selected males and females were grouped into NHIS and non-NHIS clients. Adult males and adult females were contacted and grouped into NHIS and non-NHIS with a group of between eight (8) to ten (10) people who agreed and constituted for the FGDs in order to have manageable but effective discussions. The FGDs were conducted based on available guidelines (Bernard, 1995; Denzen and Lincoln, 2000). Two FGDs were conducted in each of the clusters – males and females with one group either NHIS or non-NHIS. 12 FGDs were conducted with 6 of them being NHIS and 6 being non-NHIS. An interview guide was used for the FGDs and the discussions recorded on tapes. A total of 12 FGDs were conducted (i.e. 6 for NHIS respondents and 6 for non-NHIS respondents).

3.6 DATA COLLECTION TECHNIQUES/METHODS AND TOOLS

A structured survey questionnaire was used in the exit interviews. Four hundred and six (406) respondents were interviewed. Each interview lasted for about 15 minutes. Two hundred and ninety (290) participants were on NHIS and one hundred and sixteen (116) were non-NHIS.

An interview guide was used for the IDIs. The IDIs were recorded on tape with notes taken and later transcribed. The IDIs and FGDs were on themes: waiting time, physical examination of patients, laboratory tests, return for review of illness, attitude of staff, rating of quality of care, rating of services before NHIS and with NHIS

An interview guide was used for the FGDs and the discussions recorded on tapes with notes taken and later transcribed.

3.7 QUALITY CONTROL

A pre-test was done at St Jude's Clinic (Private Clinic) and that allowed me ensure that the instruments measure the right responses.

Completed questionnaires were checked on the field before they were brought to the study office. At the office, completed questionnaires were double checked, with all queries resolved and filed by their study identification numbers before data entry. Completed questionnaires were all double entered to ensure accuracy. Verifications were run at defined intervals to correct any inconsistencies.

3.8 DATA PROCESSING AND ANALYSIS

All questionnaires were entered using EPIDATA software. STATA statistical package was used for the analysis. Univariate analysis was used to describe socio-demographic characteristics of respondents. The statistical point estimates were computed and presented as means, proportions or percentages for all the background characteristics, NHIS and non-NHIS characteristics. Descriptive statistics and multivariate analysis were used to represent the quality of health care as perceived by NHIS and non-NHIS participants. All statistical tests are two sided and an alpha level ≤ 0.05 considered significant.

The qualitative data was recorded, transcribed and organized according to themes. Analysis of the qualitative data was done manually using a matrix. Quality of care analysis was done to determine how they were perceived by NHIS and non-NHIS participants or respondents.

3.9 ETHICAL CONSIDERATIONS

Ethical approvals: The research proposal was submitted to the ethics committees of the Ghana Health Service and the Navrongo Health Research Centre Institutional Review Board (IRB) for which written approvals were obtained.

Community consent: Discussions were held with chiefs, opinion leaders and community members of the study area at durbars to explain the purpose, procedures, benefits and if any risks of the study to potential participants, before the start of the study. Consent from leaders (chiefs, assemblymen, opinion leaders) was sought before inviting community members for the focus group discussions and those who attend the health facilities to participate in the study.

Individual consent: Study participants did not stand any additional risk by participating in the study. Participants or respondents were assured the right to refuse to answer any question that they were not comfortable with. They also had the right to withdraw from the study at anytime that they did not feel comfortable to continue.

Facilities Consent: Consent for the exit interviews and in-depth interviews took place at the hospital and health centres. The study received approval from the District Director of Health

Services, the Hospital Director (Medical Superintendent) and the heads of the health centres. They signed the consent forms for these interviews.

Confidentiality and Data Safety: Confidentiality and privacy of participants or respondents information were guaranteed. Participants were required to sign or thump print the consent form before interviews. Data collected shall be used only for the purpose of this study.

CHAPTER FOUR

4.0 RESULTS

The results section presents the background characteristics of the respondents and examines the characteristics of NHIS and non-NHIS clients on quality performance variables such as waiting time, attitude of staff, clinical and laboratory examination. It compares the perception and assessment of NHIS and non-NHIS clients on these variables. It also compared perceptions before NHIS and during NHIS implementation.

4.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Respondents in the exit interview were people who attended the health facilities either by themselves or brought children for health care. In all, 406 people participated in the exit interview; about 76% of them were females. Teenagers (<20 years) constituted about 13% of the respondents of which 16% and 12% were of the males and females respectively, whilst about nine percent were aged sixty and above years old (Table 1).

The participants were of two major ethnic groupings – Kassena (62%) and Nankani (34.0%). Other ethnic groups constituted four percent of respondents.

Most of the respondents were married (68%) and those who were never married constituting 24% (Table 1).

The religious denominations of the participants were: Christians 78%, Moslems 7% and traditional 15% (Table 1).

With respondents educational attainment, about 37% of them had no formal education (never been to school) of which 38% were females and 33% males and about 19% of the

participants had only primary school education. Those who had up to secondary school education (SSS) were about 15% and about five percent tertiary education. About four percent constituted others: made up of those who attended Community Health Nurses training, Teachers' Training College and Vocational training schools (Table 1).

On occupation, about 39% of the respondents were farmers and 25% of them were traders (Table 1).

Table 1: Background Characteristics of Respondents

	Male (N= 96)	Female (N= 310)	Total (N= 406)
Age group (years)			
<=19	15.6	11.9	12.8
20-24	11.5	22.3	19.7
25-29	16.6	21.0	20.0
30-34	10.4	11.0	10.8
35-39	10.4	10.3	10.3
40-44	8.3	9.7	9.4
45-49	4.2	2.9	3.2
50-54	4.2	3.5	3.7
55-59	4.2	0.6	1.5
60>=	14.6	6.8	8.6
	100	100	100
Educational level			
Never been to Sch.	33.3	38.1	37.0
Primary	16.7	19.3	18.7
Mid/JSS	20.8	21.0	20.9
SSS	15.6	14.5	14.8
Tertiary	9.4	3.2	4.7
Others (College, etc)	4.2	3.9	3.9
	100	100	100
Marital Status			
Never married	33.3	21.0	23.9
Married	58.3	72.6	69.2
Divorced/separated	4.2	1.3	2.0
Widowed	4.2	5.1	4.9
	100	100	100
Religion			
Christian	61.5	82.9	77.8
Moslem	7.3	7.1	7.1
Traditional	31.2	9.7	14.8
Other	0.0	0.3	0.3
	100	100	100
Ethnicity			
Kassem	51.0	64.8	61.6
Nankam	41.7	31.6	34.0
Other	7.3	3.6	4.4
	100	100	100
Occupation			
Civil/Public Servant	12.5	3.9	5.9
Farmer	47.9	36.1	38.9
Trader	8.3	29.7	24.6
Other (students etc)	31.3	30.3	30.6
	100	100	100
Mean Household size	5.7	5.4	5.5
NHIS Reg.	68.7	72.3	71.4

The distribution between NHIS and non-NHIS clients' of some of the background variables were also taken in to consideration. On ethnicity of respondents, 66% of them who registered with the NHIS were Kassenas compared to 51% of those not registered with the NHIS. Forty four percent NHIS respondents compared to 30% non-NHIS were Nankanis. On educational level of respondents, 31% of those registered with the NHIS had never been to school compared to 51% of those not registered with the NHIS. Five percent of NHIS clients compared to about four percent of non-NHIS clients attended tertiary schools. Eighty percent of NHIS clients compared to 72% of non-NHIS clients were Christians (Table 2).

Table 2: Demography Characteristics of NHIS and non-NHIS respondents

	NHIS status		
Ethnicity	NHIS	Non-NHIS	Total
Nankam	30.0	44.0	34.0
Kassem	65.9	50.9	61.6
Other	4.1	5.2	4.4
Total	100	100	100
Educational level			
Never been to school	31.4	50.9	37.0
Primary School	18.3	19.8	18.7
Middle School/JSS	23.1	15.5	20.9
Senior Secondary School (SSS)	16.5	10.3	14.8
Tertiary	5.2	3.5	4.7
Other	5.5	0.0	3.9
Total	100	100	100
Religion			
Christian	80.3	71.5	77.8
Moslem	7.2	6.9	7.1
Traditional	12.1	21.6	14.8
Other	0.4	0.0	0.3
Total	100	100	100

4.2 Waiting Time

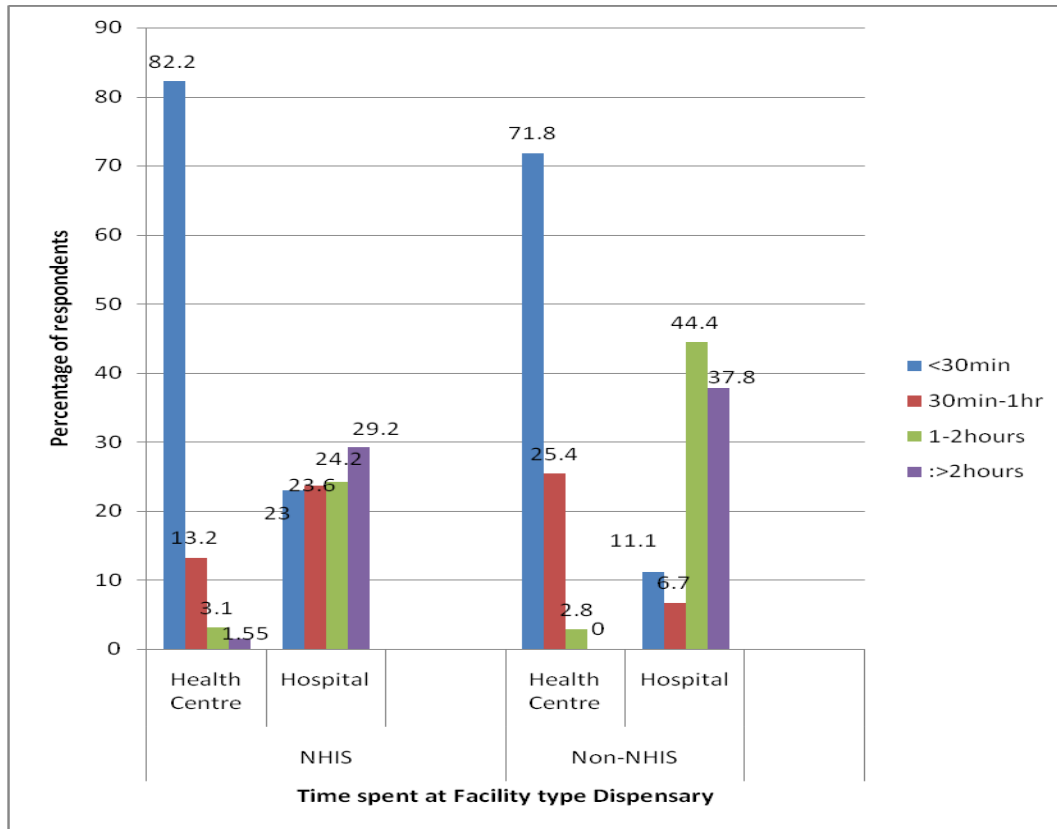
The overall waiting time observed by both NHIS and non-NHIS clients at the various departments of the treatment process for less than thirty minutes was 45-49% of respondents.

At the laboratory 16% of the respondents reported to have spent less than thirty minutes before receiving their test results. Waiting time of more than two hours was spent at the laboratory before collecting results by 52% of NHIS clients compared with 50% of non-NHIS clients (Table 3). However, based on facility type, 29% of NHIS clients who attended the hospital spent more than two hours, compared to 38% of the non-NHIS who spent the same waiting time. And 24% of NHIS respondents said they spent between one and two hours, compared to the 44 % of non-NHIS respondents who said they spent the same time (Table 3, Figure 3).

Table 3: Waiting time

	NHIS			Non-NHIS			Total (All)
	Health Centre (%)	Dist Hospital (%)	Total (%)	Health centre (%)	Dist Hospital (%)	Total (%)	
OPD Records							
<30min	73.64	29.19	49.0	57.75	26.67	45.7	48.0
30min-1hr	20.16	25.47	23.1	32.39	28.89	31.0	25.4
1-2hours	4.65	27.95	17.6	7.04	28.89	15.5	17.0
:>2hours	1.55	17.39	10.3	2.82	15.56	7.8	9.6
			100			100	100
Consulting							
<30min	55.81	39.13	46.6	49.30	24.44	39.7	44.6
30min-1hr	31.78	26.09	28.6	36.62	35.56	36.2	30.8
1-2hours	9.30	22.98	16.9	9.86	28.89	17.2	17.0
:>2hours	3.10	11.80	7.9	4.23	11.11	6.9	7.6
			100			100	100
Laboratory							
<30min			19.4			0.0	16.2
30min-1hr			9.7			33.3	13.5
1-2hours			19.3			16.7	18.9
:>2hours			51.6			50.0	51.4

Figure 3: Waiting time at dispensary



Though the quantitative study did not indicated long waiting time in most departments at the health facilities, in the qualitative study, participants in the discussions were of the view that there is now an increase in hospital attendance and as a result, waiting time at every stage of the hospital process has been lengthened. Some discussants complained of waiting for long hours for their folders and sometimes facing the frustration of not being able to retrieve them. Others complained of the waiting period before seeing the doctor. These complaints were not different from those at the dispensary.

R-Now that there is health insurance, the people are many. The time you wait to collect your drugs from the dispensary is too long. You may spend so many hours waiting before you collect your drugs. (FGD, FEMALES NHIS NABANGO)

R: Those who don't have the health insurance, theirs is fast. If you go and you don't have the health insurance they just write your name and pick your card for you and you go. (FGD, FEMALES NHIS, SABORO)

R: What I am also saying is that the long waiting time is everywhere. The Records department, where you go to queue before you see the doctor, the dispensary, even the laboratory, if they refer you there, when you go there, if you don't take care, you won't get your results until the following day. So it is everywhere. (FGD FEMALES NHIS, SABORO)

It was evident from the health providers that the introduction of the scheme with the increased facility attendance contributed to long waiting hours before accessing care especially at the records and dispensary departments.

R: ...when they are tired then the folders that came the previous day, they try to pile them and during the process they misfile some folders. The misfiling is creating a lot of waiting time. The filing system is such that if you misfile you will find it difficult to locate the folder unless of course you give the person a temporary folder or a new folder. It is difficult to retrieve it and it accounts for part of the waiting time. There is also considerable time spent at the dispensary by patients whilst they wait to collect their drugs. We conducted quality assurance interviews in the hospital ourselves which helped us to educate our staff and things are improving. (IDI, ADMINISTRATOR, HOSPITAL)

4.3 Attitude of Health Staff

Both NHIS and non-NHIS clients said the attitude of the staff in general was satisfactory.

About seventy percent of the respondents who visited the various departments during the treatment processes said the attitude of the health staff was satisfactory (table 4).

Table 4: Respondents' perception on Staff Attitude

Staff attitude			
	No (N=116)	Yes (N=290)	Total (N=406)
Records			
Poor	6.9	13.1	11.3
Satisfactory	73.3	67.2	69.0
Good	19.8	19.7	19.7
Total	100	100	100.
Nurse desk			
Poor	0.9	2.4	2.0
Satisfactory	79.3	80.0	79.8
Good	19.8	17.6	18.2
Total	100	100	100
Clinician			
Poor	2.6	3.1	3.0
Satisfactory	76.7	71.7	73.1
Good	20.7	25.2	23.9
Total	100	100	100
Dispensary			
Poor	7.8	15.2	13.0
Satisfactory	74.1	64.8	67.5
Good	18.1	20.0	19.5
Total	100	100	100
laboratory staff	No(N=6)	Yes(N=31)	Total(N=37)
Attitude	%	%	%
Poor	0.0	6.4	5.6
Satisfactory	80.0	83.9	83.3
Good	20.0	9.7	11.1
Total	100	100	100

The quantitative study showed high perceived satisfaction of the attitude of the staff.

However, some of the discussants reported being ill-treated by health workers simply because they were NHIS clients. They said they were always accused by health workers of coming to the hospital just because they hold NHIS cards. Also, when they present their cards and the staff realise that they are NHIS clients, they do not pay much attention to them.

There were complains that the nurses in the consulting rooms do not usually allow them to give all their complaints to the doctor.

R- Some of the workers are not just trying, sometimes when you give them your NHIS card, they will ask you to drop it in the box whilst sitting down conversing. Even if you are going to die, they don't care, so on that part they are not trying at all. (FGD, FEMALES NHIS SABORO)

R- The doctors too do not have problem, but the consulting nurse, the one who would listen to the story and tell the doctor are not trying, when you want to take your time to explain your situation to them, they rather shout at you to hurry-up because others were waiting outside, so because of crowd you should not tell the doctor all your problems, do they always want us to keep some and come later when you could just say everything and get the treatment? So the nurses are not always trying. FGD NAMOLO WOMEN NON-NHIS)

The health providers denied that they were being rude to NHIS clients. Some of them alleged that some of the NHIS clients merely come to test the system while others come to collect drugs for other family members. It also came to light that the present low staff level in the various departments of the health facilities is putting pressure on the few who are available and this often leads to frustrations on the part of the health providers who also transfer such emotions onto the clients.

R: .. the day that they collect the health insurance, the following day they will get up and come with 5 at a spread and so I have to question them. If not because of the health insurance, can you just get up and bring your whole family here? Are you sick? I have to question them because the health insurance people will come and see the same name on the register 5 to 6 times. And then depending on the treatment you give to them, others will come with that number of patients to collect other drugs to go and use for some people at home. So we've been aware we've been told of what some of the people do. So when they come I question them. Why you should bring that number; is it that all of them fell sick at the same time? Is it that one was sick and you waited till the other one was sick and you still waited until the other one was sick? Then after that I ask her, today that you have come with all of them to use the new health insurance eh? (IDI, MA)

R: I will say that because of this national health insurance scheme people attend the health facility more than before. They also come at the time they want. I will also say that sometimes, if you want to look at the sickness, it is not something that they would have brought to the hospital if they were not on health insurance. (IDI, MA)

4.4 Clinical Examination

Thirty nine percent of the NHIS clients as compared to 35% of non-NHIS clients said they were not physically examined by the clinician and in all 38% of the respondents said they were not physically examined by clinicians (Table 5).

Table 5: Clients Expectation of services in the health facilities

Physical examination by clinician	Non-NHIS	NHIS	Total
Yes	65.5	60.7	62.1
No	34.5	39.3	37.9
Total	100	100	100
Laboratory test			
Yes	5.2	10.7	9.1
No	94.8	89.3	90.9
Total	100	100	100
Asked to come for review of illness			
Yes	53.4	52.8	53.0
No	46.6	47.2	47.0
Total	100	100	100
Instruction on how to take medicines			
Yes	98.3	96.6	97.0
No	1.7	3.4	3.0
	100	100	100
Received all prescribed medicine at health facility			
Yes	68.1	53.4	57.6
No	31.9	46.5	42.4

Some of the discussants said they have had to report to the health facilities with the same illness on a number of occasions and that this was because the health staff are not spending time to examine them to give them appropriate treatment. They said whenever they are given drugs and they do not get better and return to the health facility, they are usually given the same drugs which do not help their course. Some of them get frustrated and go to drug stores to buy drugs to do self-treatment.

R- I want to say that for those of us with insurance, in fact in terms of examinations, they are not doing well because when you go to see a doctor, before you explain what is worrying you, they have finished writing the drug and the drug that would be given to you might not be for the sickness that sent you there. Last, I went there and complained of waist and stomach pains, they rather gave me quinine, so I still feel pains in my waist. So I want to say that, they don't give the right drugs at all. (FGD FEMALES NHIS, SABORO)

R-If you complain of your sickness, they will not give you the drug for that illness, they will only give paracetamol. They will even give you half of the paracetamol. When you say you have abdominal pain, they will give you paracetamol, chest pains they will give you paracetamol, bodily pains they will give you paracetamol, no other drug. (FGD, FEMALES NHIS, NABANGO)

4.5 Laboratory Test

Of all the 406 respondents, only 37 of them were requested by the clinicians to do laboratory tests. Thirty one of them registered with the NHIS and 6 of them were not registered with the NHIS (Table 5).

4.6 Review of Illness

Forty seven percent of NHIS clients and about 47% of non-NHIS clients said they were not asked to return for review of their illness (Table 5).

In the qualitative discussions study, participants were of the view that the clinicians in most cases asked them to come back at a specific date or told that when they finished taking their medication and there was no improvement, they should come back for review.

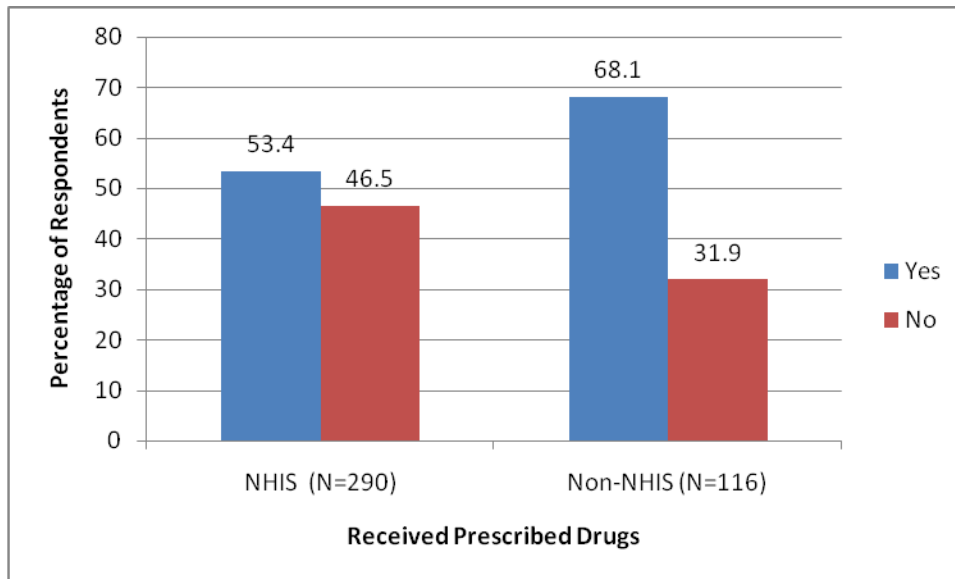
R. As for that one they used to say that after five days if it not better come back. (FGD NAMOLO WOMEN NON-NHIS)

R. sometimes, it depends on your sickness that you come to the hospital. Sometimes they will tell you that after this you should come back. Like this my eye, they told me to come back after one week, so I think it depends on the sickness that sent you there. (FGD NAMOLO WOMEN NON-NHIS)

4.7 Availability of Prescribed Medicines at Dispensary

Forty seven percent of NHIS clients compared to 32% of non-NHIS clients said they did not receive all their prescribed drugs from the health facilities' dispensaries (Figure 4).

Figure 4: Percentage of clients who Received Prescribed Medicines at Dispensaries



In the qualitative part of the study, the community members also complained that some of the drugs prescribed are not usually available and therefore they had to go and buy from drug stores. Some of the community members also said that even though they are NHIS clients, they have had to buy some expensive drugs from the drug stores because such drugs are not covered by NHIS.

R- There are no drugs in our hospital here, they only give you paracetamol and some few drugs and then ask you to go to Agangmikire's shop or to Sirigu to get it. Sometimes, it is a problem for people. (FGD MALES NON-NHIS NABANGO)

R- To me, some say the quality of drugs given in the hospital when you have insurance is discouraging, they think if you even pay cash and you are giving quality drugs is better because there are some drugs health insurance do not cover with the reason that they are expensive, so people prefer to go to ST. Jude or even any chemical seller for quality service. (FGD, FEMALES NON-NHIS, NAMOLO)

The health providers confirmed that some of the drugs are usually not available at the health facilities. They however said that for those drugs that the facilities are not able to supply, the patients are usually given prescriptions to go to an NHIS accredited chemical shop to purchase them. Usually, when the drug is not available at the pharmacy, efforts are made by the pharmacists to give an alternative drug to the patient but some insist on getting the prescribed drugs which they have to buy from the private pharmacists.

R: When you run out of drugs, you write for them to go to the chemical shops and buy. So that one, they always complain and it is not our making too. They have to go to the chemical shops to collect the drug and sometimes you go and the drug too will not be there. So sometimes they complain that you tell them to come for drugs and when they come the drug will not be there and it is not our making. (IDI, MA)

R: Yes they write. But what the pharmacist was doing is that if the drug is not sold at the pharmacy, or is higher in terms of cost, he gives you an alternative but if the patient insists, then definitely you have to buy it at the private pharmacy which has been accredited by the health insurance.(IDI, HEALTH ADMINISTRATOR)

4.8 Multivariate Analysis on Perceived Quality of Care

On perceived quality of health care, multivariate analysis was done. Respondents who registered with the NHIS were about 1.4 times likely to perceive that the quality of health care was better than the non-NHIS respondents (OR =.44, 95% CI: 0.79, 2.62), $p = 0.23$, however the difference was not statistically significant. On occupation, traders were 5.6 times more likely to perceive that health care was good compared to civil/public servants (OR = 5.58, 95% CI: 1.3, 24.0), $p = 0.02$, indicating statistically significant difference. At the health facilities where clients sought for health care, there was a statistically significant difference in the perception of quality health care between those who attended the hospital and for those who attended health centres, as 95% of respondents who attended the hospital were less likely to perceive quality of care at the hospital as good compared to those who

attended the Health Centres (OR =0.05, 95% CI: 0.025, 0.096), $p < 0.001$. On ethnicity, Kassenas were 87% more likely to perceive that the health care at the health facilities were poor compared to other ethnic group (OR = 0.13, 95% CI: 0.03, 0.52), $p = 0.004$ and the difference was statistically significant. Similarly statistically significant difference was shown, where the Nankanis were 88% more likely to perceive that the health care was poor compared to the ‘Other ethnic groups’ [OR = 0.12, 95% (CI 0.03, 0.47), $p = 0.004$ (Table 6).

Table 6: Multivariate analysis of variables that likely influence perception on quality of health care

Variable	Adjusted OR	95% CI	*P-value
Sex			
Male	1	-	-
Female	1.00	0.53, 1.92	0.980
Educational level			
None	1	-	-
Primary	0.56	0.27, 1.18	0.130
JSS/JHS/Mid School	1.05	0.48, 2.29	0.900
SSS/SHS	0.91	0.38, 2.16	0.830
Tertiary	1.31	0.32, 5.40	0.710
Other	0.55	0.10, 2.86	0.470
Occupation			
Civil/public servant	1	-	-
Farmer	2.72	0.60, 12.30	0.200
Trader	5.58	1.30, 24.00	0.020
Other	2.65	0.71, 9.84	0.150
Religion			
Christianity	1	-	-
Islam	0.53	0.20, 1.40	0.200
Traditional	0.65	0.28, 1.51	0.320
NHIS			
Non-registered	1	-	-
Register	1.44	0.79, 2.62	0.230
Type of health facility			
Health centres	1	-	-
District Hospital	0.05	0.03, 0.01	<0.001
Ethnicity			
Other	1	-	-
Nankam	0.13	0.03, 0.52	0.004
Kassem	0.12	0.03, 0.47	0.004

4.9 Perception of Quality of Care at Health Facilities

In general the results showed that both NHIS and non-NHIS clients perceive the health insurance scheme to be good (87.2% of those on NHIS and 89.7% for non- NHIS) $p = 0.05$ (table 7).

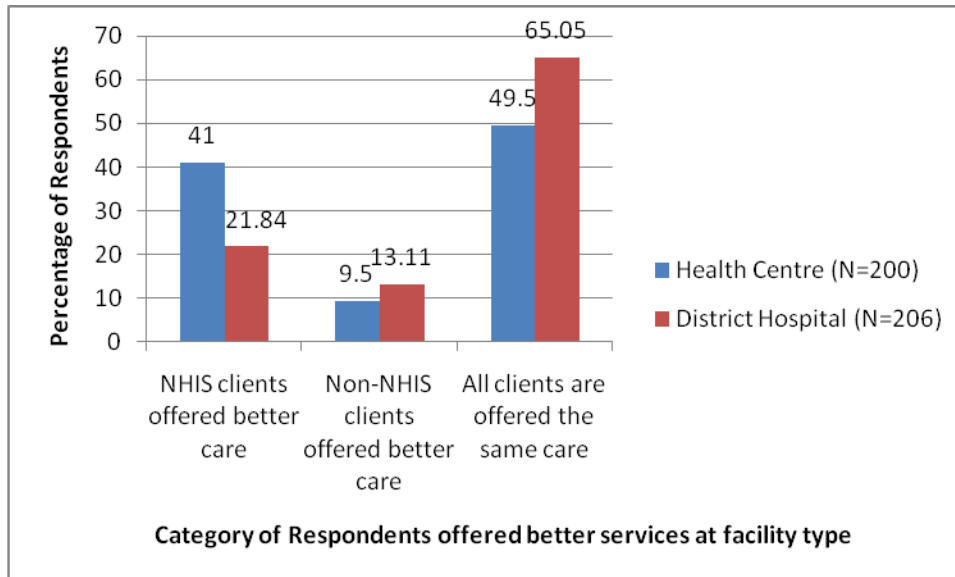
Table 7: Perception of quality of care

Perception of quality of care	NHIS	Non-NHIS	Total	p-value
Poor	37	12	49	0.50
	75.5	24.5	100	
	12.8	10.3	12.1	
Good	253	104	357	
	70.9	29.1	100	
	87.2	89.7	87.9	
Total	290	116	406	
	71.4	28.6	100	
	100	100	100	

4.9 Differing Services between NHIS and Non-NHIS clients

Of all the respondents who attended the health facilities, 30% of them said health care given to NHIS clients was better than care given to non-NHIS clients as compared to 11% of them who said the health care given to non-NHIS clients was better than that given to NHIS clients. However, 57% of all the clients said services or care to both NHIS and non-NHIS clients was the same. Both NHIS and non-NHIS clients who attended the health centres and hospital had the same opinion (Figure 5).

Figure 5: Difference in Services between NHIS and Non-NHIS clients



4.10 Quality of Care before and with NHIS

There was a significant ($p=0.05$) relationship between the perception of quality of care before and with the implementation of the NHIS. The proportion of respondents who perceived the quality of care to be good before the implementation of the NHIS was 84.2% and those who perceived it to be good with NHIS implementation was also 87.9%. However, the difference in proportion before and with NHIS implementation was 3.7 % (95% CI: -1.1%, 8.5%); $p=0.13$, which is not statistically significant at 5% level (table 8).

Table 8: Test of association on perception of Quality of Care before and with NHIS

	With NHIS			*p-value
Before NHIS	Poor	Good	Total	0.05
Poor	3	61	64	
	4.69	95.31	100	
	6.12	17.09	15.76	
Good	46	296	342	
	13.45	86.55	100	
	93.88	82.91	84.24	
Total	49	357	406	
	12.07	87.93	100	
	100	100	100	

*chi-square test

The perception of quality of care before and with NHIS implementation at the district hospital and health centres was significantly different. At health centres the proportion of both NHIS and non-NHIS respondents' perception of quality of care before and with NHIS implementation was 73.5% and 96.0% respectively (table 8). This represents a difference in proportion of -22.5% (95% CI: -29.2%, -15.8%); $p < 0.001$. On the contrary, for NHIS and non-NHIS at the district hospital, the proportion of respondents' perception of quality of care before was 94.7% and 80.1% with NHIS implementation. Similarly, this represents a difference in proportion of 14.6% (95% CI: 8.3%, 20.9%); $p < 0.001$ (table 9).

Table 9: Comparing respondents’ perception of quality of care before and with NHIS implementation at health centres

Perception of quality of care before NHIS	Health Centres		Total	Perception of quality of care with NHIS	Health Centres		Total
	NHIS	Non-NHIS			NHIS	Non-NHIS	
Poor	28	25	53	poor	6	2	8
	52.8	47.2	100		75.0	25.0	100
	21.7	35.2	26.5		4.7	2.8	4.0
Good	101	46	147	good	123	69	192
	68.7	31.3	100		64.1	35.9	100
	78.3	64.8	73.5		95.4	97.2	96.0
Total	129	71	200	Total	129	71	200
	64.5	35.5	100		64.5	35.5	100
	100	100	100		100	100	100

Comparison of respondents’ perception of quality of care before and with NHIS implementation at health centres. Difference = -22.5% (95% CI: -29.2%, -15.8%). That is comparing 73.5% and 96.0%. P-value<0.001

Table 10: Comparing respondents’ perception of quality of care before and with NHIS implementation at district hospital

Perception of quality of care before NHIS	District Hospital		Total	Perception of quality of care with NHIS	District Hospital		Total
	NHIS	Non-NHIS			NHIS	Non-NHIS	
Poor	9	2	11	Poor	31	10	41
	81.82	18.18	100		75.6	24.4	100
	5.59	4.44	5.3		19.3	22.2	19.9
Good	152	43	195	Good	130	35	165
	77.95	22.05	100		78.8	21.2	100
	94.41	95.56	94.7		80.8	77.8	80.1
Total	161	45	206	Total	161	45	206
	78.16	21.84	100		78.2	21.8	100
	100	100	100		100	100	100

Comparison of respondents’ perception of quality of care before and with NHIS at district hospital. Difference = 13.6% (95% CI: 7.4%, 20.0%). That is comparing 94.7% and 80.1%. P-value<0.001

In the qualitative study, the services rendered at the hospital have been perceived to be poor and the inception of the scheme has further worsened the plight of clients especially those who hold NHIS cards. To some of them, the health services before the NHIS implementation provided them the satisfaction that they need at the health facilities and thus advocate a return to the system before NHIS.

Some of the community members were of the view that the introduction of the scheme has affected negatively the services rendered in the health facilities. These included the attitude of the nurses, feeding, bedding and record keeping.

R- When health insurance was not there, they were working more than now. That time, when you are admitted at the hospital, they treat you well feed you three (3) times a day, but now services are poor when you are admitted there is no food for you again. Respondents laugh! Yes it's true. If you are going to sleep there you need to carry your own bed sheet, when insurance was not there those things were all provided, you get up in the morning, take your porridge and so on and these things are out, left to me they should stop the health insurance and go back to cash payment, that system was good.(The respondents including the moderator laugh!) (FGD WOMEN NHIS, NABANGO)

R- Ok, now that there is health insurance and that of the cash payment system, there is great difference. The quality of health service at the cash payment system is better than the health insurance. The health personnel are no more serious compared to the cash payment system. When you visit the hospital with the health insurance, they don't attach seriousness to the health care at all, they are always doing their own things. Unlike the cash payment system they used to look at us very well even if you are at the point of death but now things have changed. (FGD WOMEN NON-NHIS, NAMOLO)

For me, when the health insurance wasn't there, they use to attend to the people very well than now because you will have to give money before they take care of you very well, but now if you have health insurance, they say you don't have money because it is free. So for me, even if you go to pay and they take care of you it is better. (FGD, NAMOLO MEN NHIS)

4.11 Motivation to Register with the NHIS

In the qualitative aspect of the study, motivation to be part of the scheme was explored among community members.

There were some constraints and apprehensions about being part of the scheme. Community members reported they are generally poor and so do not have the needed funds to register with the scheme. Some were also of the view that they do not fall sick and do not find it necessary to register. Others felt that since treatment given to non-NHIS clients at the health facilities is usually better than that for NHIS cardholders, there is no need to register.

R-The health insurance is beneficial but we don't have money, it is poverty. (FGD, MALES NON-NHIS, NABANGO)

R-Some people can afford to pay but the way they treat those with health insurance at the hospitals, people don't want to do it. (FGD, FEMALES NHIS NABANGO)

R-Some people say they don't fall sick so they will not register. (FGD, NON-NHIS, NABANGO)

R-Since I did it, I have not got any benefit from it. So if I continue with it, I will only worry myself for nothing. If I had benefited from it, I would have continued with it; but when I went to the hospital my condition did not get any better. I still have the sickness in my body worrying me. (FGD MALES NHIS SIRIGU)

Despite these constraints and apprehensions about the scheme, generally, community members drove their motivation to register from hearing that being part of the scheme will benefit them. There were testimonies of some of these benefits from either self-experiences or hearsay. The health providers also reported that the scheme has changed the health seeking behaviour of community members. They reported that people now come to the hospital early to seek treatment and so most of the hospitalised cases are those who are not on the scheme

and have to pay for the services. They explained that those not on the scheme only visit the health facility when their conditions are serious.

R-It is beneficial; when I went to Navrongo hospital, if I were going to pay cash, I would not have been able to pay. The total amount was one million; if I were going to pay, they would have sold a cow and the cow may not fetch that much. (FGD FEMALES NHIS NABANGO)

R: More of the un-insured end up getting admitted at the hospital. Due to the cost, they don't come to the hospital early so by the time they come, they come very late. But for the insured, they utilize a lot of the OPD services and so the numbers on admission are not usually much. (MA, IDI)

CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

Determining the perceptions of quality of health care should be a major focus of health services by health systems. It could be viewed as an essential step in taking measures to improve the quality of health services and increase consumer confidence in the health care system.

There have been efforts by the office of the Health Insurance scheme to continue to increase the enrolment of people into the scheme with the Kassena-Nankana District registering 59,205 which was about 40% of the population. Those who have registered with the scheme would have their health needs catered for without the need to pay out-of-pocket at the point of service utilisation and thus enable them obtain access to a package of acceptable, quality health services (Government of Ghana, 2004).

However the perception of the quality of services rendered at the health facilities would be the determining factor that would encourage, motivate and convince people in their enrolment in the NHIS and for those enrolled to continue to patronise the service. In the Kassena-Nankana District, the number of people who attend the health centres are fewer compared to the War Memorial (district) hospital which was seen as probably better equipped, has more qualified staff than the health centres and is a referral point. The perception of the quality of care especially at the hospital is seen as poor. This could be attributed to the increased hospital attendance and inadequate staffing (clinicians, nurses and other paramedical staff) resulting in sometimes delays or longer waiting times, the worst

being at the hospital dispensary. Both NHIS and non-NHIS clients who attended the hospital were not satisfied with the services or perceived the services as poor.

The perception of the quality of care at the health centres has been viewed as good or satisfactory. Both NHIS and non-NHIS clients who attended the health centres were in general satisfied with the services at the health facilities.

5.2 Waiting Time

It is obvious from the findings that with the inception of the NHIS, more people now have the opportunity to attend health facilities either because they previously could not afford to pay hospital bills or because they merely want to benefit from the system. This increase in the number of outpatients has not been compensated by any increase in the human resource capacity of the health facilities and so the same personnel have to serve a higher population of outpatients. This has necessarily led to long hours of waiting for patients at each of the departments in the treatment process. This situation corroborates with the assertion by the Canadian Medical Association (2005), Leddy et al (2003), Akazili et al (2005) and others on excessive waiting time.

5.3 Attitude of Health Staff

Though the quantitative survey did not show any significant differences in the responses of NHIS clients and non-NHIS clients by facility, in the qualitative survey, some community members complained that health workers were discriminating among NHIS cardholders and non-cardholders. The community members suspected that the health workers probably

benefit from treating non-NHIS clients and therefore give them better attention. The situation where health workers assume that the patient is faking illness simply because he/she holds an NHIS card could lead to less attention being paid to such a patient. This probably explains why some of the NHIS cardholders tend to return to the health facility with the same complaint as was reported in the discussions. This situation could be potentially detrimental to the success of the scheme. In providing health care, the health worker-patient interaction or relationships are seen as psychotherapeutic methods in themselves. The perceived quality of the health worker-patient relationship could, in the long run, come out as the most significant factor in bringing about patient satisfaction and loyalty as corroborated by Bowers et al, (2000) and Cho et al, (2004).

5.4 Clinical Examinations

Even though 35% of the insured and 39% of the non-insured respondents said they were not physically examined, all patients would have wished that they were examined. Patients reporting for health care at health facilities in the Kassena-Nankana district see physical examination as part of treatment process and will psychologically feel satisfied that the clinician touched or examined him/her after the complaint of ill health. This is collaborated in other studies (Roelandt, 2003).

5.5 Laboratory Tests

Laboratory tests in most cases provide the clinician with some information that would guide him/her to take or decide on a definite diagnosis and arrive at appropriate treatment. With less than 10% of both NHIS and non-NHIS patients in the Kassena-Nankana District having

laboratory tests done, it only leaves the clinician to use only her/his judgement based on the clinical signs and symptoms in deciding on the diagnosis and treatment. The costs of laboratory tests are expensive. However laboratory tests could be requested for NHIS clients where basic laboratory tests are covered by the NHIS as shown in the study where 37 of the 406 respondents did laboratory tests, 31 of them were NHIS clients. Laboratory tests to assist clinicians in arriving at diagnosis are in line with what is stated by other researchers including Dahl (2006), Font et al (2001) and Nsimba (2002).

5.5 Availability of Prescribed Drugs

It is usually convenient for the patient if he/she is able to access all the health needs at one place. This expectation has however been poorly met by the health system which did not make available all the needed prescribed drugs for patient treatment. The study revealed that patients are compelled to take their drugs from private chemical shops or pharmacies. The essential drug list has further limited patients to the type of drugs that they can access within the scheme. Having drugs available at the health facility prevent patients from obtaining their medicines from private pharmacies has been stated by others (Babar et al, 2007),

5.6 Perceived Quality of Care

In general the results show that both NHIS and non-NHIS clients perceived the health insurance scheme to be good. Respondents who attended the district hospital perceived the quality of services as poor, compared to those at the health centres who perceived the quality

of services to be good. In the quantitative study, NHIS respondents were more likely to perceive that quality of health care services was better compare to non-NHIS respondents.

The perception of poor quality of care at the district hospital could lead to poor utilization of the facility as collaborated by others (Hibbard et al, and Zaslavsky et al. 2000).

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATION

6.1 Conclusion

The quantitative study showed that the general perceptions of the quality of health care at the health facilities in the Kassena-Nankana District by both NHIS and non-NHIS clients were good. However, while the quality of health care at the health centre level was perceived by both NHIS and non-NHIS clients to have improved with the inception of NHIS, at the district hospital, the quality of care was perceived to be poor with the inception of the NHIS by both NHIS and non-NHIS clients.

In the qualitative part of the study patients talked of having to wait for longer hours before being served especially at the district hospital dispensary. Health facility staff are not also paying attention to NHIS cardholders because they are perceived to be merely testing the new health care financing system. As a result the services provided to NHIS clients are perceived by the clients to be generally unsatisfactory. Non-NHIS clients who pay cash for their services are perceived to be receiving better attention than the NHIS clients. Generally, however, community members think that the concept of the NHIS is laudable and beneficial as it has succeeded in enabling the poor majority who could not patronise the health facilities due to its associated high bills, to now do so. Presently, their expectations are that the health facilities will provide them all the services that they desire in a humane manner. The onus therefore lies with the health facilities to respond to the challenges that come with the NHIS especially in meeting the expectations of their clients.

Prudent strategies are therefore needed to be taken that will bring about improvement in the quality of care at the health facilities and change the people's negative perceptions.

An improvement in the quality of care at the health facilities would influence the people's perceptions leading to a positive changed mind set. With that those registered already would be motivated to stay and new clients would be encouraged to register and benefit from an improved quality health care.

6.2 Recommendations:

All stakeholders including the Ghana Health Service and Management of the NHIS should embark on joint health education and promotions on prevention in order to reduce OPD attendance.

6.2.1 Health providers

The findings suggest that strategies to provide good quality care in the health facilities in the Kassena-Nankana District should focus on increasing staff levels in all the departments at the health facilities to contain the increasing number of outpatients. They should also organise periodic in-service training for staff on customer care. Clinicians should do well to do physical examinations, ask patients to return for review and request for laboratory test to be done where it is appropriate.

6.2.2 National Health Insurance Scheme:

New educational strategies are required to address the informational needs of both registered NHIS and non registered individuals. Such strategies should aim at educating them of the difficulties associated with the implementation of new policies and provide assurance that the benefits outweigh the challenges which with time will be resolved.

Community-based strategies should be initiated to bring about increased awareness of the benefits of the NHIS and demystify the negative perceptions of the NHIS and the service package.

6.2.3 Further Research:

There is the need for follow up studies on perception and quality of care at the Kassena-Nankana District and in other parts of the country to be carried out to provide further evidence that will guide policy makers to modify and implement a successful and sustainable scheme.

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APPENDICES

Appendix 1: EXIT INTERVIEW QUESTIONNAIRE

SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF GHANA, LEGON

A COMPARATIVE STUDY OF COMMUNITY PERCEPTION OF QUALITY OF CARE WITH THE INCEPTION OF THE NATIONAL HEALTH INSURANCE SCHEME IN THE KASSENA NANKANA DISTRICT

Form Number:

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Name of Respondent: Compound ID:

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Date of interview:

--	--	--	--	--	--	--	--

Code of Interviewer: Name of Health Facility:

No	QUESTION	CODE												
1.0	SECTION A: PERSONAL/HOUSEHOLD INFORMATION													
1.1	Sex: <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td>Male</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">2</td> <td>Female</td> </tr> </table>	1	Male	2	Female	Q101SEX								
1	Male													
2	Female													
1.2	Age: <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>			Q102AGE										
1.3	Name of Respondent's Community:	Q103COMMUN												
1.4	Language spoken: <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td>Kassem</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">2</td> <td>Nankam</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">3</td> <td>Others (specify).....</td> </tr> </table>	1	Kassem	2	Nankam	3	Others (specify).....	Q104LANSPO						
1	Kassem													
2	Nankam													
3	Others (specify).....													
1.5	Marital Status: <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td>Never Married</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">2</td> <td>Married/Living Together</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">3</td> <td>Divorced/Separated</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">4</td> <td>Widowed</td> </tr> </table>	1	Never Married	2	Married/Living Together	3	Divorced/Separated	4	Widowed	Q105MARSTA				
1	Never Married													
2	Married/Living Together													
3	Divorced/Separated													
4	Widowed													
1.6	What is your level of education? <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">1</td> <td>None</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">2</td> <td>Primary</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">3</td> <td>JSS</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">4</td> <td>SSS</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">5</td> <td>Tertiary</td> </tr> <tr> <td style="width: 20px; height: 20px; text-align: center;">6</td> <td>Other (specify)</td> </tr> </table>	1	None	2	Primary	3	JSS	4	SSS	5	Tertiary	6	Other (specify)	Q106LEVEDU
1	None													
2	Primary													
3	JSS													
4	SSS													
5	Tertiary													
6	Other (specify)													

1.7	Occupation? <input type="checkbox"/> 1 Civil/Public servant <input type="checkbox"/> 2 Farmer <input type="checkbox"/> 3 Trader <input type="checkbox"/> 4 Other (Specify).....	Q107OCPAT
1.8	What is your religion? <input type="checkbox"/> 1 Christian <input type="checkbox"/> 2 Moslem <input type="checkbox"/> 3 Traditional <input type="checkbox"/> 4 Other (specify).....	Q108RELIG
1.9	How many people are in your household? <input type="text"/> <input type="text"/>	Q109HSEHLD
1.10	How many people in your household are registered with the NHIS? <input type="text"/> <input type="text"/>	Q110NHISH
1.11	Are you registered with the NHIS? <input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	Q111INHISR
1.12	How many times have you attended hospital/health facility this year? <input type="text"/> <input type="text"/>	Q112HOSP
2.0	SECTION B: PERCEPTION INDICATORS 2. RECORDS DEPARTMENT	
2.1	Did you have a seat while waiting to collect your treatment folder? <input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	Q201SEATR
2.2	How long did it take you to get your treatment folder from Records? <input type="checkbox"/> 1 Very long: > 2 hour <input type="checkbox"/> 2 Long: 1- 2 hours <input type="checkbox"/> 3 Not too long: ½ - 1hour <input type="checkbox"/> 4 Not long at all: < ½ hrs	Q202TIMER

2.3	<p>How was the attitude of the Records staff?</p> <p><input type="checkbox"/> 1 Very poor</p> <p><input type="checkbox"/> 2 Poor</p> <p><input type="checkbox"/> 3 Satisfactory</p> <p><input type="checkbox"/> 4 Good</p> <p><input type="checkbox"/> 5 Very good</p>	Q203ATTIR
2.4	<p>Were satisfied with the services at the Records Department?</p> <p><input type="checkbox"/> 1 Very dissatisfied</p> <p><input type="checkbox"/> 2 Somewhat dissatisfied</p> <p><input type="checkbox"/> 3 Somewhat satisfied</p> <p><input type="checkbox"/> 4 Very satisfied</p>	Q204SATR
3.0	SECTION B: PERCEPTION INDICATORS	
3.1	<p>3. NURSES TABLE</p> <p>Did you have a seat while waiting to see the Nurse(s)?</p> <p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No</p>	Q301SEATC
3.2	<p>How long did you wait before you saw the Nurse(s)?</p> <p><input type="checkbox"/> 1 Very long: > 2 hour</p> <p><input type="checkbox"/> 2 Long: 1- 2 hours</p> <p><input type="checkbox"/> 3 Not too long: ½ - 1hour</p> <p><input type="checkbox"/> 4 Not long at all: < ½ hrs</p>	Q302TIMEN
3.3	<p>Were your vital signs (temperature, BP, weight) taken?</p> <p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No</p>	Q303VITALS
3.4	<p>How was the attitude of the Nurse (s)?</p> <p><input type="checkbox"/> 1 Very poor</p> <p><input type="checkbox"/> 2 Poor</p> <p><input type="checkbox"/> 3 Satisfactory</p> <p><input type="checkbox"/> 4 Good</p> <p><input type="checkbox"/> 5 Very good</p>	Q304ATTIN

3.5	<p>Were you satisfied with the services at the nurses table?</p> <p><input type="checkbox"/> 1 Very dissatisfied</p> <p><input type="checkbox"/> 2 Somewhat dissatisfied</p> <p><input type="checkbox"/> 3 Somewhat satisfied</p> <p><input type="checkbox"/> 4 Very satisfied</p>	Q305SATN
4.0	SECTION B: PERCEPTION INDICATORS	
	4. CONSULTING ROOM	
4.1	<p>Did you have a seat while waiting to see the Clinician?</p> <p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No</p>	Q401SEATC
4.2	<p>How long did you wait before you saw the Clinician?</p> <p><input type="checkbox"/> 1 Very long: > 2 hour</p> <p><input type="checkbox"/> 2 Long: 1- 2 hours</p> <p><input type="checkbox"/> 3 Not too long: ½ - 1 hour</p> <p><input type="checkbox"/> 4 Not long at all: < ½ hrs</p>	Q402TIMEC
4.3	<p>Who saw you?</p> <p><input type="checkbox"/> 1 Doctor</p> <p><input type="checkbox"/> 2 Medical Assistant</p> <p><input type="checkbox"/> 3 Nurse</p> <p><input type="checkbox"/> 4 Don't know</p>	Q403SEEN
4.4	<p>Did the Clinician examine you?</p> <p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No</p>	Q404EXAM
4.5	<p>Were you told what is making you ill/sick (diagnosis)?</p> <p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No</p>	Q405DIAGN
4.6	<p>Were you asked to do any laboratory test?</p> <p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No</p>	Q406LABTE
4.7	<p>Were you asked to come back for review?</p> <p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No</p>	Q407REVDO

4.8	<p>How was the attitude of the Clinician?</p> <p><input type="checkbox"/> 1 Very poor</p> <p><input type="checkbox"/> 2 Poor</p> <p><input type="checkbox"/> 3 Satisfactory</p> <p><input type="checkbox"/> 4 Good</p> <p><input type="checkbox"/> 5 Very good</p>	Q408ATIDO
4.9	<p>Were you satisfied with the services at the consultation stage?</p> <p><input type="checkbox"/> 1 Very dissatisfied</p> <p><input type="checkbox"/> 2 Somewhat dissatisfied</p> <p><input type="checkbox"/> 3 Somewhat satisfied</p> <p><input type="checkbox"/> 4 Very satisfied</p>	Q409SATC
5.0 SECTION B: PERCEPTION INDICATORS		
5. LABORATORY		
5.1	<p>Did you have a seat while waiting for your laboratory test? (If no to do lab test skip to No. 6.1)</p> <p><input type="checkbox"/> 1 Yes</p> <p><input type="checkbox"/> 2 No</p>	Q501SEATL
5.2	<p>How long did you wait before your laboratory test was done?</p> <p><input type="checkbox"/> 1 Very long: > 2 hour</p> <p><input type="checkbox"/> 2 Long: 1- 2 hours</p> <p><input type="checkbox"/> 3 Not too long: ½ - 1hour</p> <p><input type="checkbox"/> 4 Not long at all: < ½ hrs</p>	Q502TIMEL
5.3	<p>How was the attitude of the Laboratory staff?</p> <p><input type="checkbox"/> 1 Very poor</p> <p><input type="checkbox"/> 2 Poor</p> <p><input type="checkbox"/> 3 Satisfactory</p> <p><input type="checkbox"/> 4 Good</p> <p><input type="checkbox"/> 5 Very good</p>	Q503ATTIL
5.4	<p>Were you satisfied with the services at the Laboratory?</p> <p><input type="checkbox"/> 1 Very dissatisfied</p> <p><input type="checkbox"/> 2 Somewhat dissatisfied</p> <p><input type="checkbox"/> 3 Somewhat satisfied</p> <p><input type="checkbox"/> 4 Very satisfied</p>	Q504SATL

6.0	SECTION B: PERCEPTION INDICATORS 6. PHARMACY	
6.1	Did you have a seat while waiting to receive your medicine? <input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	Q601SEATP
6.2	How long did you wait before you received your medicine? <input type="checkbox"/> 1 Very long: > 2 hour <input type="checkbox"/> 2 Long: 1- 2 hours <input type="checkbox"/> 3 Not too long: ½ - 1 hour <input type="checkbox"/> 4 Not long at all: < ½ hrs	Q602TIMEP
6.3	Did you receive all the medicines prescribed for you? <input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	Q603DRUGS
6.4	Were you given instructions on how to take your medicine? <input type="checkbox"/> 1 Yes <input type="checkbox"/> 2 No	Q604INSTM
6.5	Were you satisfied with the instructions given you as to how to take your medicine? <input type="checkbox"/> 1 Very dissatisfied <input type="checkbox"/> 2 Somewhat dissatisfied <input type="checkbox"/> 3 Somewhat satisfied <input type="checkbox"/> 4 Very satisfied	Q605INSTR
6.6	How was the attitude of the Dispensing staff? <input type="checkbox"/> 1 Very poor <input type="checkbox"/> 2 Poor <input type="checkbox"/> 3 Satisfactory <input type="checkbox"/> 4 Good <input type="checkbox"/> 5 Very good	Q606ATTIP
6.7	Were you satisfied with the services at the Pharmacy Department? <input type="checkbox"/> 1 Very dissatisfied <input type="checkbox"/> 2 Somewhat dissatisfied <input type="checkbox"/> 3 Somewhat satisfied <input type="checkbox"/> 4 Very satisfied	Q607SATP
7.0	SECTION B: PERCEPTION INDICATORS 7. NATIONAL HEALTH INSURANCE SCHEME	

7.1	<p>How did you rate the quality of services in this facility before the implementation of the NHIS?</p> <p><input type="checkbox"/> 1 Very poor</p> <p><input type="checkbox"/> 2 Poor</p> <p><input type="checkbox"/> 3 Satisfactory</p> <p><input type="checkbox"/> 4 Good</p> <p><input type="checkbox"/> 5 Very good</p>	Q701BNHIS
7.2	<p>Does quality of services differ between NHIS and non-NHIS clients?</p> <p><input type="checkbox"/> 1 NHIS clients are offered better care</p> <p><input type="checkbox"/> 2 Non-NHIS clients are offered better care</p> <p><input type="checkbox"/> 3 All clients are offered the same care</p>	Q702QDIF
7.3	<p>How did you rate the quality of services in this facility currently with implementation of the NHIS?</p> <p><input type="checkbox"/> 1 Very poor</p> <p><input type="checkbox"/> 2 Poor</p> <p><input type="checkbox"/> 3 Satisfactory</p> <p><input type="checkbox"/> 4 Good</p> <p><input type="checkbox"/> 5 Very good</p>	Q703QSERV

This information is very helpful for us. Do you have any questions to ask? Thank you very much for your time.

APPENDIX 2: FGD/IDI GUIDE

SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF GHANA, LEGON

I am a student from the School of Public Health, University of Ghana conducting a research to compare community perception of quality of health care with the inception of the National Health Insurance Scheme (NHIS). I would like to invite you to participate in the study.

Your participation in the study will take about 30 minutes and it will involve you answering a few questions. If you do not feel comfortable with any question, you can refuse to answer it. You may also decide to withdraw from the study if at any point in the interview you do not feel comfortable to continue.

The interview will be recorded but this will not be shared with anybody. The information that you will give me in this interview shall be treated as confidential and shall only be used for the purpose of this study.

The ethics committees of the Ghana Health Service and the Navrongo Health Research Centre have given approval for this study to be carried out. If you have any questions regarding your rights as a participant in this study you may contact the Dean of the School of Public Health, Prof. Fred Binka on telephone number 021517500, the Chairman of the Ghana Health Service Ethics Review Committee, Prof Amoah on telephone number 021681109 and/or The Acting Chair, Institutional Review Board, Navrongo Health Research Centre on telephone numbers 074222310, 0244204848.

If you have questions regarding your participation in the study, you may contact Mr. Robert Awineboya Alirigia, at the Navrongo Health Research Centre, Navrongo or call him on 0244 374081.

Do you agree to participate in the study?

Yes.....1
No.....2

If yes,
Name of participant:

Sign/thump print.....

Date:.....

Signed..... Date.....

Robert Awineboya Alirigia

SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF GHANA, LEGON

IDI Guide for Health Providers

Name of facility, Interviewee's rank

1. What is the population of your catchment area? Probe – how many communities are served by this facility?
2. What is your staff strength? Have you got adequate staff for all the department/units in this facility? If no why? When will this be solved?
3. Is the staff able to cope with the daily workload in this facility? Has there been an increase/decrease in utilization of services of the facility? Are your staff motivated? What kind of motivation?
4. On the average how many clients attend this facility per day, month, or year? What proportion of these are NHIS clients?
5. Are there differences in the treatment between i.e. NHIS and non-NHIS clients, ages, sex, pregnant women etc?
6. What is the waiting time spent by clients in the various treatment process points? Probe. (Where do you think clients spend most time? Why?)
7. How is the attitude of your clients? Probe- attitude of NHIS and non-NHIS clients. How do clients perceive the attitude of your staff? – at the various levels of the treatment process?
8. How do you rate the performance of your staff? How do you rate the performance of the various departments in the facility?
9. What are the challenges since the introduction of the NHIS?

This information is very helpful for us. Do you have any questions to ask? Thank you very much for your time.

SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF GHANA, LEGON

FGD GUIDE for Community members

Name of community:

1. Have you visited the health facility this year for health care? Probe number of visits this year? When was the last visit?
2. At health facility, where did you begin the process of seeking health care? How was the attendance? Probe – enough seats, waiting time and attitude of staff at the various points of the health care process (records unit, nurses table, consulting room, laboratory, and dispensary).
3. What did the clinician do after telling him/her your problem? Probe – physical examination. Whether told by the clinician of diagnosis or what illness you have? Whether asked to do laboratory test? Whether told to come back for review? After how many days/month? Whether satisfied with the services of the clinician?
4. Did you go to the Dispensary for medicine? How was the procedure? Probe- whether got all your medicine prescribed? Told how to take medicine?
5. Whether condition cured, improved or worsen after taking the medicine? What happened next?
6. What was the quality of services you received at the various levels/points? Probe- at OPD, Laboratory, Dispensary? Where services satisfactory? How would you have rated the service? Which level/point was most satisfactory and the poorest (health centre, hospital).
7. How would you rate the over all services at the facility you visited before the inception of the NHIS?
8. Was there preferential treatment for clients? Probe- age, sex, etc. Were there differences in services for NHIS and non-NHIS client? If yes why? How?
9. How do you think of the quality of services in the health facility since the introduction of the NHIS?
10. Non NHIS clients – Why are you not registered with NHIS? Probe for reason

This information is very helpful for us. Do you have any questions to ask? Thank you very much for your time.

Appendix 3: Consent Form

CONSENT FORM FOR RESPONDENTS PARTICIPATING IN EXIT INTERVIEW

STUDY TITLE: A COMPARATIVE STUDY OF COMMUNITY PERCEPTION OF QUALITY OF CARE WITH THE INCEPTION OF THE NATIONAL HEALTH INSURANCE SCHEME IN THE KASSENA NANKANA DISTRICT.

INTRODUCTION

I am a student from the School of Public Health, University of Ghana conducting a research to compare community perception of quality of health care with the inception of the National Health Insurance Scheme (NHIS). I would like to invite you to participate in the study. A consent form will be read to you before you decide whether to participate in the study or not.

STUDY PROCEDURE

You are being invited to answer a few questions concerning your perception of the quality of healthcare in the health facility or hospital. Your participation in the study will last for 20 minutes and will end today.

BENEFITS

There are no direct benefits to you for your participation in the study. We however hope that the information that will be gotten from this study will help us in improving the quality of health care in the district and nationwide.

RISKS/DISCOMFORTS

The risks involved in taking part in this study are minimal. These include the inconvenience that the interview will cause you and the time that you will spend answering the questions. Some of the questions may also appear too personal and therefore embarrassing. However, well trained field staff or I will conduct the interviews in order to minimize these risks.

CONFIDENTIALITY

All the information that you will provide will be treated as confidential. When the forms are completed they will be kept in a locked cabinet and apart from members of the ethics committees and members of the study team, no other person will have access to your information. We shall not mention your name in any report or publication that might come out of this study.

VOLUNTARINESS

Participating in this study is purely voluntary. You can decide to refuse to participate if you want. Should you choose not to participate in the study, you will not suffer in any way for it

and the study will not be affected by it. If you do not feel comfortable to answer any question, you may choose not to answer it. In the course of the interview if you do not feel comfortable to continue your participation, you are at liberty to withdraw from the study.

CONTACTS

If you have any questions regarding your rights as a participant in this study you may contact the Dean of the School of Public Health, Prof. Fred Binka on telephone number 021517500, the Chairman of the Ghana Health Service Ethics Review Committee, Prof Amoah on telephone number 021681109 and/or The Acting Chair, Institutional Review Board, Navrongo Health Research Centre on telephone numbers 074222310, 0244204848.

If you have any questions regarding your participation in the study, you may contact Mr. Robert Awineboya Alirigia at the Navrongo Health Research Centre or call him on 0244 374081.

The Ethical Committees of the Ghana Health Service and the Navrongo Health Research Centre IRB have reviewed this proposal and have granted approval for the study to be carried out.

Will you like to participate in the study?

If yes,

Name of Participant:

Sign/thump print.....

Date:

Signed..... Date.....

Robert Awineboya Alirigia