

**HEALTHCARE COST AND UTILIZATION OF HEALTHCARE
SERVICES BY THE INSURED AND UNINSURED CIVIL
SERVANTS IN SELECTED FEDERAL GOVERNMENT
AGENCIES IN ABAKALIKI**

By

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**THE DEPARTMENT OF NURSING SCIENCES
FACULTY OF HEALTH SCIENCES AND TECHNOLOGY
UNIVERSITY OF NIGERIA
ENUGU CAMPUS**

MARCH, 2016

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THE DEPARTMENT OF NURSING SCIENCES

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SUPERVISIOR: Dr. OKORONKWO I.L.

MARCH, 2016

CERTIFICATION

This is to certify that this study is truly original and has not been submitted in part or whole to any other university. It has been approved and accepted for the purpose it was submitted.

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ABSTRACT

One major component of access to healthcare is utilization of healthcare services. The National Health Insurance Scheme (NHIS) was designed to reduce the impact of poverty on the ability of the enrollee to utilize healthcare services. The question is has NHIS increased the utilization of health care services and offered financial protection to its beneficiaries? The purpose of this study is to analyze comparatively, the healthcare cost and utilization of healthcare services by the insured and uninsured federal civil servants in Abakaliki Ebonyi State. A comparative descriptive cross-sectional design was used for the study. The sample size was 216. A multi-stage sampling procedure was employed to draw respondents for the study. The instrument for data collection was a researcher developed questionnaire. A total of 186 copies of the administered questionnaire were analyzed. About 84.7% of the NHIS insured and 98.4% uninsured federal civil servants had poor utilization of healthcare services. The un-insured paid more out of pocket on medicine and diagnostics (1000-5000), than insured federal civil servants (600-3000). The insured had good satisfaction with healthcare services [mean 2.7($\pm$ 0.5)] while the un-insured had poor satisfaction with Healthcare services [mean 1.7(0.4). There was no significant difference in Healthcare utilization between the insured and the un-insured ($p > 0.05$) despite a significant difference in early visit to hospital (access to Healthcare) ($p < 0.05$). There was a significant difference in Healthcare cost between the insured and the un-insured ($p < 0.05$). There was significant difference in satisfaction with Healthcare services between the insured and the un-insured ($p < 0.05$). The study concluded that NHIS offered financial protection to its beneficiaries. It was recommended that a well structured federal civil service employment process be instituted such that enrollment into the NHIS would be part of the statutory requirements for employment into the Federal Civil Service and public enlightenment programmes on the operations of the NHIS be intensified.

CHAPTER ONE

INTRODUCTION

Background to the Study

A nation's achievement of the tenets of Universal Coverage may be grim without an effective Health Insurance System. Ensuring that people who use a needed health service are not unduly exposed to financial hardship is the doctrine of an effective health insurance (Metiboba, 2011). Globally, at least 1 billion people suffer each year because they cannot obtain the health service they need (World Health Organization, 2014). About 150 million people who do use health services are subjected to financial catastrophe annually (Ujunwa, Onwujekwe, & Chinawa, 2014). About 100 million are pushed below the poverty line as a result of paying for the services they receive (Community Health Sciences Center for Health Policy, 2008). In a bid to efficiently manage resources, even the more developed countries have not been able to achieve a completely comprehensive health insurance system (Spreeuwers & Dinant, 2015). According to Rogers (2012), the USA spends as high as seventeen percent of Gross Domestic Product (GDP) on healthcare. With Private healthcare spending of forty six percent of all healthcare spending, and a ratio of about 24 Physicians to 10,000 population; 30 million adults still remained uninsured at the end of 2014 (World Bank, 2015). The United States Center for Disease Control (CDC) (2013) puts the figures at twenty percent population uninsured, sixteen percent population on Public health insurance and sixty four percent on Private health insurance (World Health Organization, 2014). This may suggest a possibility that some persons within this 30 million do not see any benefit of health insurance for the insured over the uninsured; therefore

motivating them to strive to remain uninsured. It could also connote that some individuals among this 30 million do not meet the basic requirements to be enrolled into any insurance scheme.

In Nigeria, the National Health Insurance Scheme (NHIS) is the major health insurance plan for a major section of the Nigerian population (Metiboba, 2011). It is funded primarily by contributions from members based on income. In the Social Health Insurance programme for the Formal Sector, contributions are premiums that make up fifteen percent of an individual's basic salary. In this the employer contributes ten percent while the employee pays five percent for coverage of themselves, their spouse, and up to four children. Participants in the Informal Sector Programme are expected to make a monthly contribution based on the benefit package of their choice. Nonetheless, the very poor, elderly, veterans and disabled are exempted from paying membership premiums (The National Health Insurance Scheme, 2015).

Currently, allocations from general government revenue comprise about twenty six percent of overall funding; six percent comes from private organizations and one percent from development partners. Household out of pocket expenditures remain the largest source of financing, providing about fifty five of total revenue. About 5 million Nigerians representing approximately three percent are enrolled in this scheme. Most of them are those in formal sectors of society. According to The National Health Insurance Scheme (2015), sixty seven percent of civil servants and professionals make use of NHIS (National Health Insurance Scheme) services. Use of NHIS services is lower among low-income groups and young people. This may be because the programme that targets these populations has not been introduced or fully incorporated into the NHIS system. Thus, while it appears that coverage has been extended

greatly for the population, there are still about 46 million Nigerians, or thirty three percent of the population, with no access at all to organized modern health insurance.

Access to healthcare is a central aspect of healthcare quality (Ujunwa, Onwujekwe, & Chinawa, 2014). Several authorities view it as the timely use of personal health services to achieve the best health outcome possible (Agency for Health Care Research and Quality, 2007). Seven million under-five deaths were recorded in 2011(WHO, 2014). Forty one percent of these deaths occurred in sub-Saharan Africa with Nigeria having twelve percent even though the vast majority of the deaths are preventable using low-cost public health interventions (World Bank, 2015). By convention, for a population to be termed healthy, that population is expected to have easy access to health care. This is what the NHIS is geared towards achieving.

One major component of access to healthcare is utilization of healthcare services (Ujunwa, Onwujekwe, & Chinawa, 2014). Utilization of healthcare services focuses on the realized access to health. Generally, utilization of healthcare services may seem limited in Nigeria. Some authors have attributed this to many reasons. For instance, long distance to healthcare facilities has long been established as one of the barriers to health care utilization (Community Health Sciences Center for Health Policy, 2008). This may even be worse in rural and semi-urban communities of developing countries like Nigeria, where the road networks are not in good condition and poverty is a significant challenge. The NHIS insurance policies are therefore designed to reduce the impact of poverty on the ability of the enrollee population to realize access to healthcare or utilize healthcare services.

The uninsured are individuals who by choice or other factors are not enrolled in any health insurance package. Although windows have been created by policy makers to absorb

individuals operating within the formal and informal sector for enrollment into the NHIS, it may seem that some are rather staying out of the scheme for some unknown reasons. It could be that they do not perceive any expected benefit with regard to improved accessibility to healthcare services, if they were to be insured.

In our ever changing world gearing more towards critical evidence-based decision making, both at an individual and communal level; there may be need to assess the impact of the NHIS on the affordability and use of healthcare services by the insured, while enjoying the expected financial protection on healthcare cost supposed of an insurance plan.

Statement of the Problem

One of the major functions of health insurance is to provide financial protection against high cost of health care. Such evidence has been shown to be inconsistent for developing countries (Nguyen, Yogesh, & Wang, 2011). The impact of health insurance in such low and middle income countries has been documented only partially and the evidence on financial protection due to health insurance is not definite (Metiboba, 2011).

Being insured or not has impact on access to health and this is an important question for policy makers because lack of insurance has implications both for individual health and societal cost (Xu, Carrin, Nguyen, Dorjsuren, & Mylena, 2006). Uninsured individuals may forgo some needed health services which can lead to poorer health expenditures in the long term (Nguyen, Yogesh, & Wang, 2011). Nevertheless, having insurance does not guarantee that the health services provided through the health insurance will be affordable, accessible, acceptable and satisfying (Lasser & Himmembetum, 2006). Thus there is need to investigate the effect of National health insurance on cost and utilization of health services of individuals with a view to

informing policy making. The question being raised in the study is: Has NHIS increased the utilization of health services and offered financial protection to its beneficiaries? There is still knowledge gap on the effect of NHIS among federal civil servants. This study is therefore designed to compare the healthcare cost and utilization of healthcare services by the insured and uninsured federal civil servants in Abakaliki Ebonyi State.

Purpose of Study

The aim of this study was to analyze comparatively, the healthcare cost and utilization of healthcare services by the insured and uninsured federal civil servants in Abakaliki Ebonyi State.

Objectives of the Study

The objectives of the study were to:

1. Compare the healthcare service utilization by the insured with the uninsured federal civil servants in Abakaliki Ebonyi State under the formal health insurance scheme.
2. Compare the Out-of-Pocket healthcare cost of the insured with those of the uninsured federal civil servants in Abakaliki Ebonyi State.
3. Compare the satisfaction with healthcare services received by the insured and uninsured federal civil servants in Abakaliki Ebonyi State.

Research Hypotheses

1. There will be no significant difference in healthcare service utilization by the insured and the uninsured federal civil servants in Abakaliki Ebonyi State under the formal health insurance scheme

2. There will be no significant difference in Out-of-Pocket healthcare cost of the insured and uninsured federal civil servants in Abakaliki Ebonyi State.
3. There will be no significant difference in the satisfaction with healthcare services received by the insured and uninsured federal civil servants in Abakaliki Ebonyi State.

Significance of the Study

Any identified difference in healthcare cost and utilization between the insured and uninsured Federal Civil Servants will uncover the amount of financial and health protection individuals get as a result of being insured or uninsured. The result of this study will serve as evidence for policy making within legislative circles as it may lend evidence to policy options. This it will do by lending more empirical evidence to policy making arguments relating Health insurance. It will further inform evidence-based but targeted intervention programmes towards an improved health insurance enrollment scheme. This it will do by adding more support to already existing knowledge on the extent to which health insurance protects the health utilization of a population. Since this study is carried out on an indigenous population, the finding of this study will serve as a source of evidence based knowledge to Health Administrators and Health Practitioners by adding to existing empirical literature. It is also hoped that the findings from this study will serve as a source of knowledge to society, and result in reduced healthcare cost burden on individuals and communities at large. This it could do by stimulating informed behaviour among health consumers in line with the findings of this study. Academically, this work will serve as a reference to other researchers in related fields of study.

Scope of Study

This study focused on comparing the healthcare cost and utilization of healthcare services of the insured and uninsured federal civil servants in Abakaliki, Ebonyi State. The study was delimited to individuals under the employment of three selected federal government agencies only who have spent a minimum period of 3years in service.

Operational Definition of Terms

Comparative analysis of healthcare cost: This refers to a process of item by item comparison of alternatives that deals with out-of-pocket payments and catastrophic healthcare cost for healthcare services obtained by respondents. For the purpose of this study, Healthcare cost would be the out-of-pocket payments for healthcare within a period of 3months.

Out-of-Pocket payments: Refers to non-reimbursed direct cash expenditure in exchange for healthcare services within a period of 3months.

Catastrophic healthcare cost: refers to out-of-pocket payments above 40% of household income within the past 3months.

Utilization of healthcare services: Refers to the number of times the respondents in this study used health services within the past 3months.

Access to healthcare: Refers to visit to hospital at the early stage of illness less than 4 days from the start of illness

Satisfaction with Healthcare service: Refers to how much a patient's healthcare expectations are achieved by a healthcare provider based on the patient's perception. It will be graded as poor satisfaction and good satisfaction.

Insured federal civil servants: Refer to individuals under the employment of the Federal Government of Nigeria who are enrolled into the National Health Insurance Scheme.

Uninsured federal civil servants: Refer to individuals under the employment of the Federal Government of Nigeria who are not enrolled in the National Health Insurance Scheme.

CHAPTER TWO

LITERATURE REVIEW

This chapter dealt with review of relevant published literature. Literature was reviewed under conceptual (utilization of healthcare services, healthcare cost, healthcare insurance, NHIS, and satisfaction with healthcare), theoretical (theory of reasoned action) and empirical review. A summary of literature was also presented.

Conceptual review

Concept of Utilization of healthcare services

According to Community Health Sciences Center for Health Policy (2008), health service utilization is a measure of a population's use of the health care services available to them. This includes the utilization of Hospital resources, Personal Care Home (PCH) resources, and physician resources. Health care utilization and health status are used to examine how efficiently a health care system produces health in a population (Ujunwa, Onwujekwe, & Chinawa, 2014). In more technical terms it is the amount of use or usage of healthcare services per unit population (Agency for Health Care Research and Quality, 2007). However, Metiboba (2011) describes utilization of healthcare services as the pattern of use of health care service within a given period of time. This may mean that the bottom line relating to utilization of healthcare services is the number of times an individual or population obtains the said healthcare service.

According to Community Health Sciences Center for Health Policy (2008), factors influencing healthcare service utilization may include: Efficiency in provision of healthcare service; Financial Cost and Financial incentives; Timely arrival of skilled healthcare service;

Effective compliance with evidence-based practices; Demand management programs that teach members when to seek healthcare assistance; Availability of clinical data warehouses and analytical tools that locate chronic populations and use predictive modeling to determine high-risk populations to be targeted for early intervention; Digital channels that utilize algorithm for treatment of minor health issues and the use of telemedicine; Patient's Satisfaction with previous healthcare services from a provider; Continuous health awareness programmes.

Concept of Healthcare Cost

The phrase "healthcare cost" is used by many to mean something different. Politicians talk about healthcare cost in reference to federal and state spending on health care (Ansah, Narh-Bana, Asiamah, Dzordzordzi, & Biantey, 2009). When hospital administrators and physicians talk about healthcare cost, they are usually referring to their costs of production, the money they spend on the resources needed to care for patients (Brownlee, Colucci, & Walsh, 2012). Business leaders use the term healthcare cost to refer to the price of insurance, or the amount they spend on their employees' health care insurance plans (Metiboba, 2011). Meanwhile, everybody bemoans out-of-pocket healthcare costs, the amount patients must pay at the doctor's office or pharmacy counter over and above whatever portion of the bill their insurance covers (Caxton, 2015).

Healthcare cost is sometimes used interchangeably with healthcare expenditure although they are technically different (Brownlee, Colucci, & Walsh, 2012); healthcare cost refers to the actual financial out-of-pocket cost of obtaining healthcare services including the costs of procedures, therapies, and medications (Ujunwa, Onwujekwe, & Chinawa, 2014). Healthcare

expenditure, on the other hand, refers to the amount of money paid by governments to produce healthcare services (Community Health Sciences Center for Health Policy, 2008).

Concept of health insurance

Health insurance is a type of arrangement that protects an individual against incurring healthcare expenses (Metiboba, 2011). According to Nguyen, Yogesh, and Wang (2011), health insurance is a type of organized coverage that pays for medical and surgical expenses that are incurred by the insured. Health insurance is defined as a coverage that provides for the payments of benefits as a result of sickness or injury; and includes insurance for losses from accident, medical expense, disability, or accidental death and dismemberment (Spreeuwers & Dinant, 2015). Health insurance can either reimburse the insured for expenses incurred from illness or injury or pay the care provider directly (The National Health Insurance Scheme, 2015). By estimating the overall risk of healthcare and health system expenses, among a targeted group, an insurer can develop a routine finance structure, such as a monthly premium or payroll tax, to ensure that money is available to pay for the health care benefits specified in the insurance agreement. The benefit is administered by a central organization such as a government agency, private business, or not-for-profit entity. Health insurance is often included in employer benefit packages as a means of enticing quality employees (Rogers, 2012).

Health insurance contracts are based on health insurance policies (Metiboba, 2011). A health insurance policy is a contract between an insurance provider (e.g. an insurance company or a government) and an individual or his/her sponsor (e.g. an employer or a community organization) (Nguyen, Yogesh, & Wang, 2011). The contract can be renewable (e.g. annually, monthly) or lifelong in the case of private insurance, or mandatory for all citizens in the case of

national plans (Spaan, Mathijssen, Tromp, McBain, Tenhave, & Baltussen, 2012). The type and amount of health care costs that will be covered by the health insurance provider are specified in writing, in a member contract or "Evidence of Coverage" booklet for private insurance, or in a national health policy for public insurance (World Health Organization, 2014). According to Metiboba (2011) the insured individual's obligations may take several forms such as: The amount the policy-holder or their sponsor (e.g. an employer) pays to the health plan to purchase health coverage (this is known as premium). The amount the insured must pay out-of-pocket before the health insurer pays its share (it is called deductible). For example, policy-holders might have to pay a ₦5,000 deductible per year, before any of their health care is covered by the health insurer. It may take several doctor's visits or prescription refills before the insured person reaches the deductible and the insurance company starts to pay for care.

The amount that the insured person must pay out of pocket before the health insurer pays for a particular visit or service is known as Co-payment. For example, an insured person might pay a ₦450 co-payment for a doctor's visit, or to obtain a prescription. A co-payment must be paid each time a particular service is obtained. Instead of, or in addition to, paying a fixed amount up front (a co-payment), the insured person may have to pay 20% of the cost of say a surgery over and above a co-payment. This is referred to as co-insurance. A co-insurance is a percentage of the total cost that an insured person may also pay in addition to paying a co-payment. If there is an upper limit on co-insurance, the policy-holder could end up owing very little, or a great deal, depending on the actual costs of the services they obtain.

Exclusions are insurance plans that do not have all services covered. The insured are generally expected to pay the full cost of non-covered services out of their own pockets. Some health insurance policies only pay for health care up to a certain amount. This is known as

coverage limits. The insured person may be expected to pay any charges in excess of the health plan's maximum payment for a specific service. In addition, some insurance company schemes have annual or lifetime coverage maxima. In these cases, the health plan will stop payment when they reach the benefit maximum and the policy-holder must pay all remaining costs.

Out of pocket maxima is similar to coverage limits, except that in this case, the insured person's payment obligation ends when they reach the out-of-pocket maximum, and health insurance pays all further covered costs. Out-of-pocket maxima can be limited to a specific benefit category (such as prescription drugs) or can apply to all coverage provided during a specific benefit year. When an amount is paid by an insurer to a health care provider for which the provider agrees to treat all members of the insurer, it is known as capitation.

Health insurance contracts are based on National health insurance policies. Insurance benefit is administered by a central organization such as a government agency, private business, or not-for-profit entity. How robust a nation's National Health Insurance Policy is, is determined by the nation's type of healthcare financing (also known as healthcare insurance).

A nation's Health Insurance tries to fulfill three basic principles of public finance which includes, raising enough revenue to provide intended health packages that assure financial protection against healthcare expenses in a sustainable manner, manage the revenue to pool health risks equitably and efficiently, and ensure that payment for health services is carried out in ways that are allocatively and technically efficient (Agency for Health Care Research and Quality, 2007). Types of health insurance financing include social health insurance, private health insurance, community based health insurance and out-of-pocket payments.

Social Health Insurance is a mechanism that typically involves a defined contribution linked to a defined package of for a specific period of time (Caxton, 2015). Thus the risk of needing healthcare is pooled across individuals who enrolled in insurance plans of the programme. According to Metiboba (2011), in many cases social insurance is compulsory such that everyone in an eligible group must enroll and pay a specified premium, and the premium is a percentage of one's wage. These contributions are specified in law and difficult to change (Nguyen, Yogesh, & Wang, 2011). In majority of countries social health insurance only covers those who are eligible (Nguyen, Yogesh, & Wang, 2011). Many schemes cover only workers in the formal sector since these groups are easier to identify and to provide contributions (Metiboba, 2011). Sometimes countries have multiple systems for different formal sector groups who have historically obtained their benefits at different times (Caxton, 2015). Governments can also pay the premiums of social insurance beneficiaries, for example using general tax revenue to subsidize pensioners, the unemployed, the poor, workers in the informal sector and some small businessmen and farmers (Rogers, 2012). Social insurance programs can be, but not always, administered by government or quasi-government agencies. In some countries both government and non-government agencies administer social health insurance for different groups in the population. One of the pros of social health insurance is that it has a high potential for providing effective risk protection, especially in high income countries (Agency for Health Care Research and Quality, 2007). One of the cons of social health insurance is that it because its contributions may feel like taxation, it may suffer from the same factors that hinder tax collection (Caxton, 2015).

Private Health Insurance is a plan where individuals could voluntarily purchase insurance from private, independent, competing sellers who charge premiums that reflect the buyer's risks rather than their ability to pay. Private insurers can be both for profit and not for profit. These

insurance purchases can be made by groups and individuals. One of the pros of private health insurance is that when individuals can choose their insurance provider they feel more willing to pay (Agency for Health Care Research and Quality, 2007). One of the cons of private insurance is that individuals with higher risks and costs are most often excluded (Caxton, 2015).

Community Based Health Insurance is often advocated as an alternative to other health financing strategies. It may be one to remedy some of the ñconsò of other approaches, such as the difficulty of reaching the rural and informal sector and the tendency for social and private health insurance to focus more on higher cost, less frequent health care services (emphasizing financial protection) rather than more common and frequent needs related to primary health care (and population health outcomes) (Ujunwa, Onwujekwe, & Chinawa, 2014). In Community Based Health Insurance, communities operate and control the financing of their health care typically through locally- based prepayment schemes. Under these schemes financing and delivery of primary care can be separated or integrated, but higher level care is usually purchased by the scheme. Providers may be individuals hired by the community or nonprofit organizations (Spaan et al, 2012). Community Based Health Insurance can also help finance the marginal costs of publicly delivered services such as user fees or additional supplies or tests that are needed. Community-based health insurance schemes vary widely in size, organization, objectives, and management. One of the pros of Community Based Health Insurance is local control and financing may produce better accountability and more attractiveness to individuals weary of using government run facilities farther away from home (Ujunwa, Onwujekwe, & Chinawa, 2014). One of the cons of Community Based Health Insurance is that risk pools are often small and vulnerable to unexpected high cost events or epidemics (Caxton, 2015).

Out-of-pocket and user fees are paid directly by patients for health care and these expenditures are not reimbursable by insurers or other third parties (Ujunwa, Onwujekwe, & Chinawa, 2014). Out of pocket payments include official user fees (charges for service), co-payments and deductibles for doctor visits and prescription medications, unofficial or informal payments, and expenditures imposed on service users for supplies and tests which may not be available in health facilities. (In counting out of pocket payments for health care, the costs of transportation and related expenses are often not included) (Agency for Health Care Research and Quality, 2007). Out of pocket payments are often the largest type of health care financing in low income countries, often larger than government spending (Caxton, 2015). They tend to decline as a share of the total as country income rises and new types of financing mechanisms, such as social and private insurance as well as increased government spending ñsubstitutedò for out of pocket spending (Metiboba, 2011). Out of pocket payments are widely agreed to be a poor way to finance health care (Ujunwa, Onwujekwe, & Chinawa, 2014). They fall disproportionately on the sick (no risk pooling) at their time of greatest need and have the worst impact on the poor (Metiboba, 2011). Household impoverishment resulting from out of pocket health spending is widely reported as a major cause of overall impoverishment (Spaan, et al., 2012).

National Health Insurance Scheme in Nigeria

Health Insurance as a source of health financing has grown in importance in developing countries (Spreeuwes & Dinant, 2015). It is being implemented as part of an approach geared towards providing effective and efficient healthcare for citizens of a nation (Nguyen, Yogesh, & Wang, 2011). In Nigeria, National Health Insurance scheme (NHIS) is currently a formal sector social health insurance programme (Metiboba, 2011). NHIS seeks to provide easy access to

healthcare for all Nigerians at an affordable cost through various prepayment plans. NHIS was designed to secure universal coverage and access to adequate and affordable healthcare in order to improve the health status of Nigerians (The National Health Insurance Scheme, 2015). The scheme provides financial protection to its registered enrollees (Metiboba, 2011).

The Nigerian NHIS is a Social Health Insurance Programme (SHIP) which combines the principles of Socialism (being one's brother's keeper) with that of Insurance (pooling of Risks and resources) (The National Health Insurance Scheme, 2015). It is a body corporate with perpetual succession established under Act 35 of 1999 to provide Social health Insurance (SHI) in Nigeria whereby the Health care services of the contributors are paid for from the pool of fund contributed by participants in the Scheme. It has the goal of improving the Health status of Nigerians as a significant co-Factor in the National Poverty Eradication Efforts (Metiboba, 2011). Its mission is to undertake a government led comprehensive Health sector Reform aimed at strengthening the National public and private Health System to enable it deliver effective, Efficient, qualitative and affordable Health Services. According to The National Health Insurance Scheme (2015), the National health insurance scheme offers insurance plans to the formal sector (public sector, organized private sector, students of tertiary institutions and voluntary participants); the Informal sector (rural community and urban self employed); vulnerable groups (the aged, disabled, prison inmates and children under 5years); and Others (Diaspora family and friend, orphans, retirees, unemployed and pregnant women).

The benefit packages include access to curative services for common ailments including consumables as out -patient care, essential drugs from NHIS accredited pharmacy providers and provision of pharmaceutical care by the Pharmacist where the beneficiary is expected to pay 10% of the total cost of drugs (co-payment); routine laboratory investigations, health education to

prevent and control of health problems such as counseling and testing for HIV/AIDS; maternal and child care; primary eye care; dental and mental services; accident and Emergency services; specialist care for medical; surgical; paediatric; internal Medicine; Obstetrics and Gynaecology; Psychiatry; ENT; Ophthalmology; Management of HIV/AIDS; hospitalisation in a general ward for a maximum of 15days per annum; physiotherapy for restorative and rehabilitative services; radiology/Medical imaging and diagnostic laboratory services; all prescribed pharmaceuticals from Federal Ministry of Health essential drug lists and co-payment; all Referrals from primary and secondary health care levels.

The contributions are earning-related and currently stand at 15% of basic salary. The employer will pay 10% while the employee pays 5% of basic salary to enjoy healthcare benefit. The contribution made by/for an insured person entitles him/her, a spouse and 4 biological children under the age of 18 to health benefits as contained in NHIS health benefits package. Additional contributions are required for extra dependants.

Insurance and healthcare utilization

Health services utilization is a component of "access to healthcare" (Ujunwa, Onwujekwe, & Chinawa, 2014). Utilization is described by Lasser and Himmembetum (2006) as comprising of realized access and potential access; where realized access is ability to obtain healthcare and potential access are factors that facilitate the use of healthcare services. This would imply that being insured provides an individual with potential access to healthcare.

Access to healthcare is a central aspect of healthcare quality (Ujunwa, Onwujekwe, & Chinawa, 2014). Access is important for the achievement of health equity (Spaan, et al., 2012). Access is defined as the timely use of personal health services to achieve the best health outcome

(World Health Organization, 2014). Access to healthcare services comprises the use of health services as well as all factors that facilitate healthcare service use (Rogers, 2012). Therefore, access to healthcare may consist of health insurance coverage, timeliness of service, availability of workforce etc.

Health insurance coverage helps individuals get into the healthcare system (Spreeuwers & Dinant, 2015). It has been documented that uninsured individuals have limited access to health care compared to the insured. Lack of adequate coverage makes it difficult for individuals to access the healthcare they need; and when they do get it, it burdens them with huge bills (Ujunwa, Onwujekwe, & Chinawa, 2014). Health insurance also ensures that individuals have usual and ongoing source of care (Spaan, et al., 2012). According to Nguyen, Yogesh, and Wang (2011), it has been documented that removing user fees and out-of-pocket payment has a positive impact in the health seeking behaviour of Ghanaians in utilizing available health services in malaria treatment.

Insurance and healthcare cost

Health insurance is more than a mechanism for spreading financial risks; it promotes use of preventive and routine health services by families and individuals in society thereby protecting society (Spaan, et al., 2012). The lack of health insurance thus has spillover effects and cost on those with insurance in society (Ujunwa, Onwujekwe, & Chinawa, 2014). The societal perspective of cost theoretically includes cost carried by all members of society (Lasser & Himmembetum, 2006). The societal cost of uninsurance would thus include collective losses to the particular society such as decreased productivity. Probably, the greatest cost of lack of insurance is the poorer health of people without insurance (Caxton, 2015). Lack of insurance

may expose individuals to financial risk and uncertainty (Agency for Health Care Research and Quality, 2007).

Satisfaction with Healthcare

According to Bleich, Özaltın, and Murray (2009) Satisfaction with healthcare is an abstract concept that measures how well the expectations of a client/patient concerning a provided healthcare service have been met. According to Health Quality Council of Alberta [HQCA] (2014), satisfaction with healthcare means the fulfillment of expectations, needs, or desires, and by giving what is required leaves no room for complaint. According to Naidu (2009), satisfaction with healthcare is the responsiveness of the healthcare system to patient's needs and expectations from the perspective of patient's experience.

Two points arise from these definitions. The first is that a feeling of satisfaction with healthcare does not imply superior service, rather implies that an acceptable standard of service was achieved. Secondly, satisfaction with healthcare can only be measured against patient's/clients expectations, needs or desires. Therefore, it is a relative concept in that what makes one satisfied (i.e adequately meets expectation) may make another dissatisfied (falls short of expectations).

Patient/client satisfaction with healthcare is a multi-dimensional healthcare construct affected by many variables (Naidu, 2009). It may involve such factors as the quality of service provided, convenience of the location where the service is provided, environment of service delivery (including cleanliness and organization) , and the value of service provided relative to price (Bleich, Özaltın, & Murray, 2009). According to HQCA (2014), patient/client satisfaction with healthcare may also involve such factors as attitude of healthcare service personnel

(politeness and attentiveness), waiting time before service delivery, availability of the needed service and the procedure of accessing care.

When satisfaction with healthcare is measured, individuals are presumed to rate or evaluate a healthcare service provider by comparing their personal subjective standards with their perception of the care received (HQCA, 2014). Therefore, satisfaction with healthcare is an attitudinal response to individual patient/client value judgement. In other words, it is a subjective measure rather than objective. In line with this, some experts argue that satisfaction with healthcare can be measured on a likert scale ranging from not satisfied to satisfied (Bleich, Özaltin, & Murray, 2009). However, according to Naidu (2009) several approaches arise when attempts are made to measure satisfaction with healthcare.

Despite problems with establishing a tangible definition of satisfaction with healthcare and its measurement the concept continues to be widely used (HQCA, 2014). Asking people how satisfied they are with healthcare or aspects of it has historically resulted in high levels, prompting alternative methods of eliciting client's/patient's evaluations (Naidu, 2009). Naidu (2009) notes that a common approach is to ask patients/clients to rate their experience of aspects of their care (such as waiting time, staff attitude, availability of service, procedure of accessing service etc). This is referred to as indirect measures of satisfaction with healthcare because they do not directly ask respondents how satisfied they are (Bleich, Özaltin, & Murray, 2009). According to HQCA (2014), the major problem with this approach is that it makes pre-emptive assumptions about the determinants of satisfaction.

Theoretical review

The theoretical review for the study is based on the Fishbein-Ajzen Theory of Reasoned Action.

Theory of Reasoned Action

Derived from the social psychology setting, the theory of reasoned action (TRA) was proposed by Ajzen and Fishbein (1980). The theory of reasoned action (TRA), as developed by Martin Fishbein and Icek Ajzen, posits that individual behaviour is driven by behavioural intentions. The theory received particular attention in the field of health consumer behaviour as it provides a simple tool to identify possibilities to change consumers' health seeking behaviour when using an innovation. To this regard, the actual use of an innovation is determined by the individual's behavioural intention to use it. The model resulting from their research is visualised in and consist of the following components:

Behavioural intentions, these include the functions of an individual's *attitude* towards the behaviour and the *subjective norm* surrounding the performance of the behaviour. Accordingly, the actual use of an innovation is determined by the individual's behavioural intention to use it. The *Attitude towards an act or a behaviour* are the individual's positive or negative feelings about performing a behaviour, determined through an assessment of one's beliefs.

Subjective norm is defined as an individual's perception of whether people important to the individual think the behaviours should be performed. To put the definition into simple terms: a person's volitional (voluntary) behaviour is predicted by his/her attitude toward that behaviour and how he/she thinks other people would view them if they performed the behaviour. A person's attitude, combined with subjective norms, forms his/her behavioral intention (Ajzen, Albarracín, & Hornik, 2007).

The three general constructs or components of TRA are related as thus:

Behavioral intention (*BI*) = Attitude (*A*) + Subjective norm (*SN*).

The above starting point in this theory is more accurately stated as thus:

$$BI = (AB)W_1 + (SN)W_2 \quad (\text{source: Ajzen, Albarracín, \& Hornik, 2007})$$

Where: BI = behavioral intention

(AB) = one's attitude toward performing the behavior

W = empirically derived weights

SN = one's subjective norm related to performing the behavior

In other words, the actual utilization of healthcare service is dependent on an individual's behavioural intention. This behavioural intention is on the one hand, determined by positive and negative feelings about the financial cost of a healthcare service. In this case, the financial cost refers to the level out-of-pocket expenditure for obtained health services. On the other hand, behavioural intent to use healthcare service is determined by the satisfaction the individual perceives while using the health service, which may be in terms of attitude of care givers, waiting time, availability of medication and the process of accessing healthcare. Therefore otherwise stated, the cost of a health care service and the satisfaction with the healthcare service received are the determinants of use or utilization of healthcare services. Therefore, how high or low the cost of obtaining healthcare service is, coupled with an individual's satisfaction with the received can increase or decrease utilization of the healthcare service. Hence the conceptual model for this study is as follows:

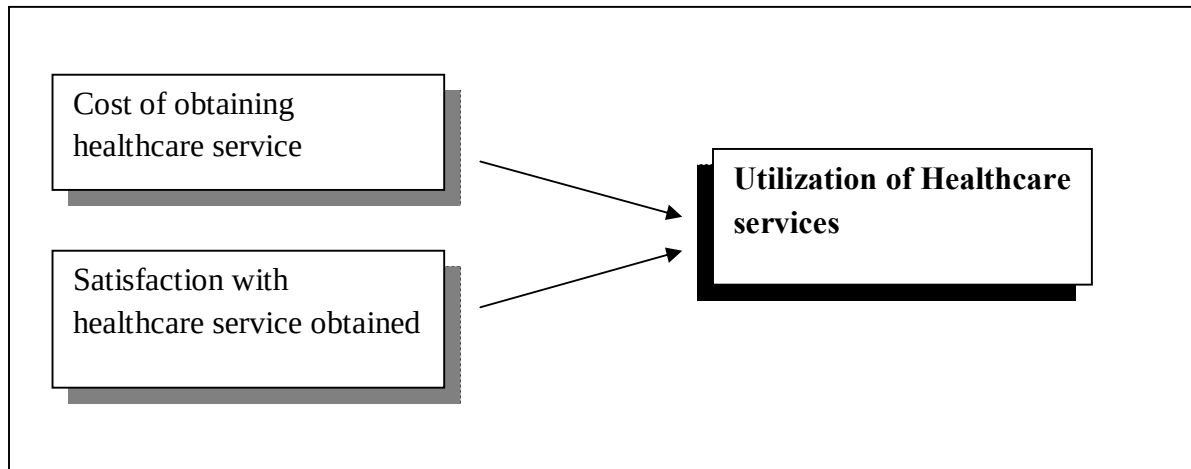


Figure1: Conceptual model for the study

(Developed by the researcher)

This conceptual model assumes that individuals who have developed a behavioural intention to act as determined by healthcare cost and satisfaction with healthcare obtained will act without any hindrance. However, the assumption that when someone forms an intention to act, they will be free to act without limitation, is often unfounded. This is because in practice, constraints such as limited ability, time, environmental limits, and unconscious habits may limit the freedom to act.

Empirical review

Ansah, Narh-Bana, Asiamah, Dzordzordzi and Biantey (2009) conducted a randomized controlled study on Free Healthcare on Health Outcomes and Healthcare Service Utilization in Dangme West District of Ghana. They investigated the impact of reduced financial burden on healthcare service utilization. A sample size of 2,592 children was used for the study. Applying a researcher developed checklist and analysing the generated data using t-test; it was found that removing out-of-pocket payments for healthcare services resulted in a significant increase in healthcare service utilization ($p < 0.05$), but no significant increase in healthcare outcomes ($p > 0.05$). Based upon these findings, the researchers concluded that removing out-of-pocket

payments for healthcare services would have a positive impact on healthcare-seeking behaviour but not on the healthcare outcomes.

Agba, Ushie and Osuchukwu (2010) conducted a cross-sectional comparative study on National Health Insurance Scheme and Employee's Access to Healthcare Services in Cross-River State. They investigated the access domain of healthcare service utilization and healthcare cost using 600 urban based federal civil servants as sample size. Applying a researcher developed questionnaire and analysing the generated data using One-way ANOVA, it was found that there is a significant difference in access to healthcare ($p < 0.05$) as well as healthcare cost ($p < 0.05$) between the insured and the uninsured. Based on these findings they concluded that insured federal civil servants had better access to healthcare services than the uninsured; and expenditure on healthcare was higher in the uninsured group compared to the insured group.

Liabsuetrakul and Oumudee (2011) conducted a cross-sectional descriptive survey on impact of health insurance and other factors on women who delivered at hospital or home in four Iranian districts. They investigated access to healthcare and utilization of healthcare services. The sample size used for the study was 2,847. The instrument of data collection was a researcher developed questionnaire. Findings revealed that women insured by universal coverage and social security perceived a lower delay in reaching a hospital but a higher delay in receiving care. Low education, unwillingness to seek care, out-of-pocket payment, worry about cost of delivery care, transportation difficulties, low perception of receiving good care or a perception of being treated badly were also associated with delays and barriers to health care. 93% agreed that health insurance could reduce financial barriers for accessing services. However, having health insurance influenced them to seek care, reach a hospital, and receive care quickly in 50%, 32%,

and 23% of the women, respectively. Based on this, the researchers concluded that Health insurance has a significant positive impact on utilization of health services.

Akande and Salaudeen (2011) conducted a study on the Effects of National Health Insurance Scheme on Utilization of Healthcare Services at University of Ilorin Teaching Hospital Staff Clinic Ilorin Nigeria. They investigated the relationship between insurance and utilization of healthcare services. A descriptive cross-sectional design was used and 29,296 records of patients seen at staff clinic, University of Ilorin Teaching Hospital, Ilorin two years before and after the commencement of National Health Insurance Scheme were reviewed. An EPI-Info software was used as instrument of data analysis. The generated data was analysed using t-test and chi-square statistical method. The study showed that the mean clinical attendance per month for check-ups before NHIS implementation was 357, but increased to 870 after NHIS implementation. Also the mean age of modal clinical attendance was 0-10years before NHIS implementation, but increased to 41-50years after NHIS implementation. The observed difference were found to be significant at $p < 0.05$. Based on this findings, the researchers concluded that NHIS led to 144% increase in the utilization of health services by enrollees at staff clinic of University of Ilorin Teaching Hospital.

Ujunwa, Onwujekwe, and Chinawa (2014) conducted a study on Health Services Utilization and Cost of The Insured and Un-Insured Federal Civil Servants under the Formal Sector Social Health Insurance Scheme in Enugu metropolis southeast Nigeria. They investigated healthcare cost, access to healthcare service, and utilization of healthcare services between the insured and uninsured. A comparative descriptive cross-sectional design was used. The sample size was 809 respondents comprising 451 insured and 358 uninsured respondents. The instrument for data collection was a researcher developed questionnaire and the generated

data were analysed using descriptive statistics and t-test statistical method; it was found that 56.7% insured and 43.3% non-insured respondents had easy access while 46% of the non-insured and 54% of the insured civil servant had difficult access to healthcare services. There was no significant difference in healthcare cost ($p < 0.05$) where the average healthcare cost per month for the insured is $1,859 \pm 54.53$ and $2,157.45 \pm 88.47$ for the non-insured. Based on these findings, the researchers concluded that the NHIS-insured civil servants have no appreciable advantage in terms of access to and cost of health services in Enugu metropolis.

Decker, Doshi, Knaup and Polsky (2012) conducted a study on ñHealth Service Use Among The Previously Insured: Is Subsidized Health Insurance Enough in Berlin Germany investigated healthcare cost, and healthcare service utilization and its relationship between insurance status before age 65 and the use of Medicare-covered services beginning at age 65. A prospective longitudinal study design was used. A sample size of 3,458 respondents was used for the study. A researcher developed questionnaire was used and generated data analysed using t-test statistical method. Findings revealed that there is no significant difference in Medicare expenditures or number of hospitalizations based on insurance status. They also found that individuals who were uninsured before age 65 did not continue to use the health care system differently after they had become insured ($p < 0.05$). Additionally, the respondents had statistically similar healthcare costs when before insurance and after insurance.

Cassedy, Fairbrother and Newacheck (2008) conducted a study on the Impact of Insurance Instability on Children's Access, Utilization and Satisfaction with Healthcare in Carolina USA. The aim was to investigate access, utilization and satisfaction with healthcare service between the insured and uninsured children. A retrospective longitudinal design was used in the study. 3,260 children hospital records were for the study. A medical expenditure panel

survey guide was used for data collection. Adjusted Odd Ratio statistical method was used to analyse generated data. Findings revealed that there were no significant differences between children continuously insured through private coverage and children continuously uninsured in terms of satisfaction with healthcare service ($p < 0.05$), while children with no insurance were significantly more likely to report having at least one problem with access to healthcare ($p < 0.05$). However, there was no significant difference in use (utilization) of health services ($p < 0.05$).

Dalinjong and Laar (2012) conducted a study on "The National Health Insurance Scheme: Perceptions and Experiences of Healthcare Providers and Clients in Two Districts in Ghana". The aim was to investigate satisfaction with healthcare services between the insured and uninsured. A comparative cross-sectional mixed (Qualitative-Quantitative) study design was used. A sample size of 400 respondents comprising 200 insured and 200 uninsured was used for the study. A researcher developed interview guide was used for the study. The study found no significant difference in waiting time between insured and uninsured in-patients ($p < 0.05$), and no significant difference in overall satisfaction with healthcare service between the insured and the uninsured ($p < 0.05$). Based on these findings, the researchers concluded that satisfaction with healthcare services is similar between insured and uninsured groups.

Jadoo, Puteh, Ahmed, and Jawdat (2012) conducted a descriptive cross-sectional study on "The Level of Patient's Satisfaction toward National Health Insurance in Istanbul City Turkey". They investigated satisfaction with healthcare by the insured. A sample size of 345 insured respondents was used for the study. The Household Structured Questionnaire and the Patient Satisfaction questionnaire were used as instrument of data collection. The generated data was analysed using descriptive statistics and bivariate Chi-square method. The study found that 53% of the insured were satisfied with National Health Insurance (NHI), 66.7% were satisfied with

access to care, 52.2% were satisfied with availability of resources and 56.5% were satisfied with process of healthcare service. Based on these findings, the researchers concluded that the insured have moderate satisfaction with provided healthcare services.

Mohammed, Mohammad, and Dong (2011) conducted a descriptive cross-sectional study on Understanding Client Satisfaction with a Health Insurance Scheme in Nigeria: Factors and Enrollee's Experiences in Ahmadu Bello University Zaria Nigeria. They investigated satisfaction with healthcare service among the insured. A sample size of 280 insured respondents out of a population of 2,458 was used for the study. A researcher developed questionnaire was used for the study. Descriptive statistics, t-test and Chi-square statistical methods were used for analysing generated data. Findings revealed that the insured were moderately satisfied with provided healthcare services within the NHIS (mean 61%, $p < 0.05$).

Iliyasu, Abubakar, Abubakar, Lawan, and Gajida (2010) conducted a study on Patient's Satisfaction with Services obtained from Aminu Kano Teaching Hospital, in Kano Nigeria. They investigated satisfaction with provided healthcare services by the uninsured public. A descriptive cross-sectional mixed (qualitative-quantitative) study design was used. A sample size of 201 respondents were used for the study. A researcher developed interview guide was applied in the study, and the generated data was analysed using descriptive statistics. The study found that 83% of the uninsured respondents were highly satisfied with provided healthcare service, 17% were not satisfied. Additionally, there was high satisfaction with Staff attitude (88%), high satisfaction with process of healthcare service (88%), high satisfaction with availability of resources (87%), and high satisfaction with waiting time (84%). Based on these findings, The researchers concluded that the uninsured are highly satisfied with provided healthcare services.

Summary of literature review

Literature was reviewed on healthcare cost, health insurance, utilization of healthcare services and satisfaction with healthcare services. The theory of reasoned action was applied to this study. Eleven empirical studies were reviewed. Four studies were in support of a positive increase in utilization of healthcare services by the insured compared to the uninsured; while three other studies found no appreciable difference in utilization between the insured and the uninsured. Only two studies targeted federal civil servants in Nigeria. One of the studies found differences in access (utilization) and healthcare cost in favour of the insured federal civil servants compared to the uninsured federal civil servants. The other study found no appreciable difference in healthcare cost and utilization between the insured and uninsured federal civil servants. Hence, the difference in healthcare cost and utilization among federal civil servants may need to be studied some more. No published peer reviewed study compared satisfaction with healthcare services between the insured and uninsured federal civil servants. It is hoped that this gap in knowledge will be filled by the findings of this study when concluded.

CHAPTER THREE

RESEARCH METHODS

This chapter presented the design of the study, the area of coverage, population of the study, sample and sampling procedure, including instrument for data collection, validity and reliability of instrument, ethical consideration, and procedure for data collection and method of data analysis.

Research design

A comparative descriptive cross-sectional design will be used for the study. This design was considered suitable in this study because it enables in-depth description of the variables being studied and also supports organised collection of data, data synthesis, interpretation and findings regarding the variables under study. Ujunwa, et al. (2014) had used this design successfully.

Area of study

The area of study is Abakaliki, capital territory of Ebonyi State. Abakaliki lies at the intersection of the Enugu, Afikpo and Ogoja roads. Abakaliki also hosts numerous Federal government agencies and a Federal Hospital, which has largely contributed to the affordability of public healthcare delivery in the city and the state. It is bordered on the east by Cross river State; west by Enugu; south by Abia state and north by Benue State. Abakaliki is the capital city of the present-day Ebonyi State. The name Abakaliki originally means Aba Nkaleke, which is a name of a community in Izzi land (Nkaleke). It is located in the southeast part of Nigeria, about 64 kilometres southeast of Enugu (Eke, 2010). Geographically, its coordinates are latitude 6°20'N

and longitude 8°6′E. It has a population at least 79,280 (Orji, 2011). The inhabitants are primarily members of the Igbo tribe. It was the headquarters of the Ogoja province before the creation of the Southeastern State in 1967 (Eke, 2010). Abakaliki is a center of agricultural trade including such products as yams, cassava, rice, kola nuts and palm oil. It is also known for its local lead, zinc, limestone and salt mining or quarrying. The city hosts many private businesses and hotels as well as federal institutions.

Population for the study

The target population for this study was all staff of selected federal government agencies in Abakaliki. The estimated federal civil servants in Abakaliki at the time of this study was 5,924 (source: Federal Inland Revenue Service Office).

Sample

To ensure internal validity of the result of this study and subsequent generalization, power analysis method was used to estimate the minimum size of subjects required for the study. According to Polit and Beck (2012), when an infinite or unknown population size is to be studied, it is typical in nursing research to use an effect size (d) ranging from 0.2 to 0.4 but must never exceed 0.5. The researcher thus chose 0.4 as effect size, error margin (α) of 0.05, confidence interval of 0.95 and Power of 0.8. Applying the stated values to a power analysis table already prepared by Polit and Beck (2012) produced a minimum sample size of 99 (appendix 2). In order to account for potential attrition, the minimum sample size was increased by 10%: $99 \times (100 + 10)\% = 108$ respondents for each of the 2 groups. Thus, Total final sample size (n) = 216. Therefore, total sample size was 216.

Inclusion criteria

The criteria for enrollment of respondents into the study included:

- Willingness to participate;
- Must be a serving staff of a selected federal government agency for at least 3 years.

Sampling procedure

A multi-stage sampling procedure was employed for this study. Stage 1, three federal agencies were purposively selected. Stage 2, for the reason of equivalent groups and a fair chance to be given to the selected federal government agencies, quota sampling was used where a total of 72 respondents (A third of the total sample) was randomly selected from each of the federal agencies. Thus seventy two (72) respondents were selected from Federal Immigration Service representing 33.3% of the sample; seventy two (72) respondents from Federal Road Safety Corp representing 33.3% of the sample; and seventy two (72) respondents from Independent National Electoral Commission giving a total of 216 respondents.

Instrument for data collection

The instrument for data collection was a researcher developed structured questionnaire. The questionnaire had a total of 22 items. The questionnaire was divided into two sections. Section A consisted of 7 items covering socio-demographic profile of respondents while section B consisted of 16 items covering the research objectives. Items 8 ï 11 dwelt on Health utilization. Items 12 ï 18 dwelt on Healthcare cost. Items 19 ï 22 was on Satisfaction with healthcare measured on a 5 point likert scale (not satisfied at all, rarely satisfied, satisfied, moderately satisfied and very satisfied).

Validity of the instrument

In establishing the validity of the proposed instrument for data collection, the face and content validity of the instrument was evaluated through the judgment of the project supervisor and two other senior lecturers from the Department of Nursing Sciences University of Nigeria Enugu campus. They cross checked the sequence or arrangement of questions on the questionnaire; they identified areas of ambiguity and made corrections and suggestions. Their corrections and suggestions were used to modify the instrument before final administration.

Reliability of the instrument

In order to establish reliability of instrument, the corrected copy of the instrument was pilot-tested with 20 staff of the Ebonyi State Ministry of Agriculture and Rural Development using test retest method within an interval of 14 days. The two sets of responses were analysed using Pearson product moment correlation. A reliability coefficient of 0.96 was obtained (appendix 3). This showed that the instrument was reliable.

Ethical consideration

Ethical permission will be obtained from the Ebonyi State University Teaching Abakaliki. Permission was obtained from the directors of the Federal Agencies before questionnaire was administered to any civil servant under their jurisdiction. Also, informed consent of the respondents was sought and purpose of the study was explained to them before engaging them to respond. More so, participation in the study was voluntary and a respondent retained the right to withdraw from participating if he wishes to do so. Above all, information provided was treated confidentially and respondent's anonymity was adequately maintained.

Procedure for data collection

With the ethical approval obtained and the letter of introduction from the Department of Nursing Sciences, University of Nigeria Enugu Campus, permission was obtained from administrative heads of the selected ministries. Data collection was done by the researcher with the help of six trained research assistants. The assistants were trained on the purpose of the study and on how and whom to administer the questionnaires to. The Questionnaire was administered to the selected civil servants on the spot in the work place setting and was collected two days later. 216 copies of the questionnaire were administered. A total of 186 copies of the administered questionnaire were retrieved giving a return rate of 86%. The data collection lasted for a period of 22 days.

Method of data analysis

Responses from the filled instrument was collated, tallied and subjected to descriptive statistics (frequency, percentage, mean and standard deviation). Test of hypothesis was done using chi square statistic. Level of significance was set at 0.05.

CHAPTER FOUR

PRESENTATION OF RESULTS

This chapter dealt with the presentation of results; interpretation and summary of findings. Out of 216 copies of the questionnaire administered, a total of 186 copies were retrieved giving a return rate of 86%. The data were presented in tables. This was done based on three research objectives.

Respondents Demography data

Table 1: Demographic Characteristics of Respondents **n = 186**

Characteristic	Category	F	%
Age	21 ï 30 years	42	22.58
	31 ï 40 years	61	32.80
	41 ï 50 years	46	24.73
	51 ï 60 years	37	19.89
Mean(± SD)			39.74(± 11.09)
Gender	Male	113	60.75
	Female	73	39.25
Marital status	Single	29	15.59
	Married	136	73.12
	Divorced	21	11.29
Highest Educational Qualification	Primary	21	11.29
	Junior secondary	58	31.18
	Senior secondary	76	40.86
	Tertiary	31	16.67
Health Insurance Status	Insured	124	67
	Un-insured	62	33

As presented in table 1 above, 42 (22.58%) respondents were aged 21 to 30 years old, 61 (32.8%) respondents were aged 31 to 40 years old, 46 (24.73%) respondents were aged 41 to 50 years old, and 37 (19.89%) respondents were aged 51 to 60 years old. The respondents have a Mean age $\pm$ SD of 39.74($\pm$ 11.09). out of the 186 respondents 113 (60.75%) were male, and 73 (39.23%) were females. 29(15.59%) respondents were single, 136(73.12%) were married and 21(11.29%) were divorced. Their educational statue showed that 21(11.29%) respondents have primary education, 58(31.18) have junior secondary education, 76(40.86%) have senior secondary education, while 31(16.67%) have tertiary education. 124(67%) are insured under NHIS while 62(33%) are un-insured.

Presentation of results according to research objectives

Research Objective one: Compare the healthcare service utilization by the insured with the uninsured federal civil servants in Abakaliki Ebonyi State under the formal health insurance scheme.

Research Hypothesis one: There will be no significant difference in healthcare service utilization by the insured and the uninsured federal civil servants in Abakaliki Ebonyi State under the formal health insurance scheme.

Table 2: Healthcare service utilization by insured and Uninsured federal civil servants **n = 186**

Questionnaire item	Response	Insured (n=124) f(%)	Uninsured (n=62) f(%)	X ²	P value
Have you or any member of your family experienced any illness in the past 3months?	Yes	124(100)	58(93.5)	85.69	0.0000*
	No	0	4(6.5)		
Did you visit the hospital for treatment?	Yes	28(22.6)	3(5.2)	8.02	0.0046
	No	96(77.4)	55(94.8)		
At what stage did you visit the hospital?	> 4days after illness began	4(14.3)	2(66.7)	13.99	0.0073
	4days after illness began	10(35.7)	1(33.3)		
	3days after illness began	6(21.4)	0		
	2days after illness began	5(17.9)	0		
	1day after illness began	3(10.7)	0		
How many times did you visit the hospital for routine checkup care in the past 3 months?	None	105(84.7)	61(98.4)	8.46	0.077
	Once	7(5.6)	1(1.6)		
	Twice	6(4.8)	0		
	Three times	4(3.2)	0		
	More than three times	2(1.7)	0		

Decision rule: $p < 0.05$ is significant.

As presented in table 2, 124 respondents were insured. 124(100%) of the insured had a member of family ill within the past 3 months. 28(22.6%) of them visited the hospital, while 99(77.4%) did not visit the hospital. Out of the insured respondents that visited the hospital, 4(14.3%) visited the hospital more than 4days after illness began, 10(35.7%) did so 4days after illness began, 6(21.4%) did so 3days after illness began, 5(17.9%) did so 2days after illness began, and 3(10.7%) did so 1day after illness began. Of all the insured respondents, 105(84.7%) never visited the hospital for routine checkup care in the past 3 months, 7(5.6%) visited once, 6(4.8%) visited twice, 4(3.2%) visited thrice, and 2(1.7%) visited more than thrice.

Sixty-two respondents were un-insured, out of which 58(93.5%) had a member of family ill within the past 3 months, while 4(6.5%) reported that no member of family experienced illness in the past 3 months. 3(5.2%) of them visited the hospital, while 55(94.8%) did not visit the hospital. Out of the un-insured respondents that visited the hospital, 2(66.7%) visited the hospital more than 4days after illness began, while 1(33.3%) did so 4days after illness began. Of all the un-insured respondents, 61(98.4%) never visited the hospital for routine checkup care in the past 3 months, while 1(1.6%) visited once.

Chi square analysis revealed a significant difference in the occurrence of feelings of illness hospital between the insured and the un-insured respondents ($p < 0.05$). It also revealed a significant difference in the visits for health care when a member of family is ill between the insured and the un-insured respondents ($p < 0.05$). It also revealed a significant difference in the stage of illness at which the ill visit the hospital for healthcare between the insured and the un-insured respondents ($p < 0.05$). Nevertheless, no significant difference was identified in number of hospital visits for routine health care check up between the insured and the un-insured respondents ($p > 0.05$). This result implied that the insured respondents had a greater tendency to visit the hospital when ill than the un-insured. Furthermore, the insured respondents had a greater tendency to visit the hospital early when ill than the un-insured. Nevertheless, there is no palpable difference in the utilization of healthcare services between the insured and the un-insured respondents in terms of number of visits within the past 3 months.

Research Objective Two: Compare the level of Out-of-Pocket healthcare cost of the insured with those of the uninsured federal civil servants in Abakaliki Ebonyi State.

Research Hypothesis Two: There will be no significant difference in Out-of-Pocket healthcare cost of the insured and uninsured federal civil servants in Abakaliki Ebonyi State.

Table 3: Out-of-Pocket healthcare cost by insured and Uninsured federal civil servants n = 186

Questionnaire item	Response	Insured (n=124) f(%)	Uninsured (n=62) f(%)	X ²	P value
Do you or members of your family pay for registration when you go for healthcare treatment?	Yes	124(100)	62(100)	0.0002	0.989
	No	0	0		
How much do you pay in Naira (for Registration)?	100 ï 500	71(57.2)	0	54.2	0.0000*
	600 ï 1000	25(20.2)	0		
	1001 - 2000	21(16.9)	27(43.6)		
	2001 ï 3000	7(5.7)	21(33.8)		
	Above 3000	0	14(22.6)		
Do you or members of your family pay for out-patient visits or consultation	Yes	0	62(100)	186.3	0.0000*
	No	124(100)	0		
How much do you pay in Naira per visit?	100 ï 500	0	0	Đ	0.0000
	600 ï 1000	0	28(45.1)		
	1001 - 2000	0	21(33.9)		
	2001 ï 3000	0	13(21.0)		
	Above 3000	0	0		
Estimate how much you have spent on medicine/drugs within the past 3months?	100 ï 500	27(21.8)	3(4.8)	24.5	0.0000*
	600 ï 1000	25(20.2)	7(11.3)		
	1001 - 3000	42(33.9)	13(20.1)		
	3001 ï 5000	19(15.2)	19(30.7)		
	Above 5000	11(8.9)	16(25.8)		
Estimate how much you have spent on diagnostic tests within the past 3months?	100 ï 500	23(18.5)	0	34.9	0.0000*
	600 ï 1000	48(38.7)	8(13.8)		
	1001 - 3000	25(20.2)	27(46.6)		
	3001 ï 5000	21(16.9)	14(24.1)		
	Above 5000	7(5.6)	9(15.5)		
How do you pay for medical treatment obtained by you or members of your household?	Total insurance	0	0	186.1	0.0000*
	Copayment	124(100)	0		
	Out of pocket cash installments	0	0		
	Out of pocket with reimbursement	0	0		
	Out of pocket cash without reimbursement	0	62(100)		

Decision rule: $p < 0.05$ is significant.

As presented in table 3, 124(100%) of the insured respondents pay for registration on first visit to the hospital. Within the past 3 months, 71(57.2%) paid 100 ï 500 naira, 25(20.2%) paid

600 ï 1000 naira, 21(16.9%) paid 1001 ï 2000 naira, and 7(5.7%) paid 2001 ï 3000 naira. 124(100%) of the insured civil servants did not pay for out-patient consultations. When asked to ñestimate how much spent on medicine in the past 3 monthsò, 27(21.8%) of the insured respondents reported 100 ï 500 naira, 25(20.2%) reported 600 ï 1000 naira, 42(33.9%) reported 1001 ï 3000 naira, 19(15.2%) reported 3001 ï 5000 naira, and 11(8.9%) reported above 5000. When asked to ñestimate how much spent on diagnostic tests in the past 3 monthsò, 23(18.5%) of the insured respondents reported 100 ï 500, 48(38.7%) reported 600 ï 1000 naira, 25(20.2%) reported 1000 ï 3000 naira, 21(16.9%) reported 3000 ï 5000 naira, and 7(5.6%) reported above 5000. 124(100%) of the insured respondents pay for health services via copayment.

Sixty-two (100%) of the un-insured respondents pay for registration on first visit to the hospital. At registration, 27(43.6%) paid 1001 ï 2000 naira, 21(33.8%) paid 2001 ï 3000 naira, and 14(22.6%) paid above 3000 naira. 62(100%) un-insured respondents pay for consultations per visit. When asked ñhow much do you pay in Naira per visit?ò 28(45.1%) reported 600 When asked to ñestimate how much spent on medicine in the past 3 monthsò, 3(4.8%) of the insured respondents reported 100 ï 500 naira, 7(11.3%) reported 600 ï 1000 naira, 13(20.1%) reported 1001 ï 3000 naira, 19(30.7%) reported 3001 ï 5000 naira, and 16(25.8%) reported above 5000. When asked to ñestimate how much spent on diagnostic tests in the past 3 monthsò, 8(13.8%) reported 600 ï 1000 naira, 27(46.6%) reported 1000 ï 3000 naira, 14(24.1%) reported 3000 ï 5000 naira, and 9(15.5%) reported above 5000. 62(100%) un-insured respondents pay for health services via Out of pocket cash without reimbursement.

Chi square analysis revealed no significant difference in payment for registration ($p > 0.05$). However, it revealed a significant difference in amount paid for registration between the insured and the un-insured respondents ($p < 0.05$). It also revealed a significant difference in

payment for out-patient consultations between the insured and the un-insured respondents ($p < 0.05$). It further revealed a significant difference in amount paid for out-patient consultations between the insured and the un-insured respondents ($p < 0.05$). Finally, it identified a significant difference in mode payment for healthcare services between the insured and the un-insured respondents ($p < 0.05$). This result implies a difference in healthcare cost between the insured and the un-insured respondents. In other words, while the respondents used different modes of payment for health services, the insured respondents had a relatively lower healthcare cost than the un-insured respondents.

Research Objective Three: Compare the satisfaction with healthcare services received by the insured and uninsured federal civil servants in Abakaliki Ebonyi State.

Research Hypothesis Three: There will be no significant difference in the level of satisfaction with healthcare services received by the insured and uninsured federal civil servants in Abakaliki Ebonyi State.

Table 4: Satisfaction with healthcare services by insured and Uninsured federal civil servants

n = 186					
Questionnaire item	Response	Insured (n=124) f(%)	Uninsured (n=62) f(%)	X ²	P value
Satisfaction with staff attitude	Not satisfied	43(34.7)	0	103.6	0.0000*
	Rarely satisfied	56(45.2)	0		
	Just satisfied	14(11.3)	29(46.8)		
	Moderately satisfied	9(7.3)	19(30.6)		
	Highly satisfied	2(1.5)	14(22.6)		
		Mean(SD) 2.0(0.4)	Mean(SD) 1.9(0.2)		
Satisfaction with waiting time	Not satisfied	66(53.2)	0	103.6	0.0000*
	Rarely satisfied	27(21.8)	28(45.2)		
	Just satisfied	24(19.4)	21(33.9)		
	Moderately satisfied	4(3.2)	11(17.7)		
	Highly satisfied	3(2.4)	2(3.2)		
		Mean(SD) 1.8(0.3)	Mean(SD) 1.4(0.6)		
Satisfaction with availability of medication	Not satisfied	0	0	103.6	0.0000*
	Rarely satisfied	4(3.2)	7(11.3)		
	Just satisfied	15(12.1)	13(20.9)		
	Moderately satisfied	26(20.9)	23(37.1)		
	Highly satisfied	79(63.8)	19(30.7)		
		Mean(SD) 4.5(0.6)	Mean(SD) 1.9(0.4)		
Satisfaction with process of accessing healthcare	Not satisfied	14(11.3)	0	103.6	0.0000*
	Rarely satisfied	65(52.4)	9(14.5)		
	Just satisfied	27(21.8)	27(43.5)		
	Moderately satisfied	13(10.5)	15(24.3)		
	Highly satisfied	5(4.0)	11(17.7)		
		Mean(SD) 2.4(0.8)	Mean(SD) 1.7(0.5)		
Grand Mean (SD)		2.7(0.5)	1.7(0.4)		

Decision rule: p < 0.05 is significant.

As presented in table 4, the insured respondents generally had good satisfaction with healthcare services at a mean of 2.7(0.5). When asked about 'satisfaction with healthcare staff attitude' 43(34.7%) of the insured respondents reported not satisfied at all with healthcare staff attitude, 56(45.2%) reported rarely satisfied, 14(11.3%) reported just satisfied, 9(7.3%) reported moderately satisfied, while 2(1.5%) reported highly satisfied. The insured respondents had a mean score of 2.0($\pm$ 0.4) on satisfaction with healthcare staff attitude, denoting poor satisfaction with healthcare staff attitude. When asked about 'satisfaction with waiting time', 66(53.2%) reported not satisfied at all, 27(21.8%) reported rarely satisfied, 24(19.4%) reported just satisfied, 4(3.2%) reported moderately satisfied, and 3(2.4%) reported highly satisfied. The insured respondents had a mean score of 1.8($\pm$ 0.3) on satisfaction with waiting time, denoting poor satisfaction with waiting time. When asked about 'satisfaction with availability of medication', 4(3.2%) reported rarely satisfied, 15(12.1%) reported just satisfied, 26(20.9%) reported moderately satisfied, and 79(63.8%) reported highly satisfied. The insured respondents had a mean score of 4.5($\pm$ 0.6) on availability of medication, denoting good satisfaction with availability of medication. Finally, when asked about 'satisfaction with process of accessing healthcare', 14(11.3%) reported not satisfied at all, 65(52.4%) reported rarely satisfied, 27(21.8%) reported just satisfied, 13(10.5%) reported moderately satisfied, while 5(4.0%) reported highly satisfied. The insured respondents had a mean score of 2.4($\pm$ 0.8) on satisfaction with process of accessing healthcare, denoting poor satisfaction with process of accessing healthcare.

On the other hand, the un-insured respondents generally had poor satisfaction with healthcare services with an overall mean of 1.7(0.4). When asked about 'satisfaction with healthcare staff attitude' 29(46.8%) of the un-insured respondents reported just satisfied,

19(30.6%) reported moderately satisfied, and 14(22.6%) reported highly satisfied. The un-insured respondents had a mean score of 1.9($\pm$ 0.2) on satisfaction with healthcare staff attitude, denoting poor satisfaction with healthcare staff attitude. When asked about 'satisfaction with waiting time', 28(45.2%) reported just satisfied, 21(33.9%) reported moderately satisfied, and 11(17.7%) reported highly satisfied. The un-insured respondents had a mean score of 1.4($\pm$ 0.6) on satisfaction with waiting time, denoting poor satisfaction with waiting time. When asked about 'satisfaction with availability of medication', 7(11.3%) reported rarely satisfied, 13(20.9%) reported just satisfied, 23(37.1%) reported moderately satisfied, 19(30.7%) reported highly satisfied. The un-insured respondents had a mean score of 1.9($\pm$ 0.4) on availability of medication, denoting good satisfaction with availability of medication. When asked about 'satisfaction with process of accessing healthcare', 9(14.5%) reported rarely satisfied, 27(43.5%) reported just satisfied, 15(24.3%) reported moderately satisfied, 11(17.70%) reported highly satisfied. The un-insured respondents had a mean score of 1.7($\pm$ 0.5) on satisfaction with process of accessing healthcare, denoting poor satisfaction with process of accessing healthcare.

Chi square analysis revealed a significant difference with healthcare staff attitude, waiting time, availability of medication and process of accessing healthcare ($p < 0.05$). This finding shows that there was a significant difference in satisfaction with Healthcare services between the insured and the un-insured civil servants ($p < 0.05$). This result implies that the un-insured federal civil servants may not be receiving quality healthcare service compared to the insured federal civil servants.

Summary of findings

- Majority (84.7%) of the insured federal civil servants had poor utilization of healthcare services.
- Majority (98.4%) of the un-insured federal civil servants had poor utilization of healthcare services.
- There was significant difference in early visit to hospital (access to Healthcare) between the insured and the un-insured federal civil servants ($p < 0.05$).
- There was no significant difference in Healthcare utilization between the insured and the un-insured federal civil servants ($p > 0.05$).
- The un-insured federal civil servants paid more out of pocket for medicine and diagnostics (1000-5000) than the insured federal civil servants (600 to 3000)
- There was a significant difference in Healthcare cost between the insured and the un-insured federal civil servants ($p < 0.05$).
- The insured respondents generally had good satisfaction with healthcare services [mean 2.7(0.5)].
- The un-insured respondents generally had poor satisfaction with Healthcare services [mean 1.7(0.4)].
- There was significant difference in satisfaction with Healthcare services between the insured and the un-insured civil servants ($p < 0.05$).

CHAPTER FIVE

DISCUSSION OF FINDINGS

This chapter dealt with discussion of major findings in the study, implication of the study, suggestions for further studies, summary, conclusion and recommendation.

Differences in healthcare service utilization of healthcare services by the insured and the uninsured federal civil servants

The present study revealed that majority of the insured and un-insured federal civil servants had poor utilization of healthcare services. The study found no significant difference in Healthcare utilization, where routine hospital visits for medical checkups were significantly similar between the insured and un-insured federal civil servants. Nevertheless, in terms of access to healthcare, the present study found that the insured had a greater tendency than the un-insured to visit the hospital earlier, and utilize healthcare services when illness has set in. This could be as a result of the cultural and traditional beliefs and stigma placed against hospital visits. Some African societies may perceive frequent hospital visits as a sign of grave ill health that may warrant social avoidance by other community members (Dalinjong & Laar, 2012). If the fore said is true, it could invariably encourage the insured and un-insured to avoid seeking routine healthcare services. In concord with the finding is Cassedy, Fairbrother and Newacheck (2008), who found no difference in routine health care visits (utilization) of health services between the insured and un-insured. However, the difference in access to health care service could be related to the mode of payment for healthcare services used by the insured and un-insured. The majority of the NHIS insured respondents made copayments for healthcare services (i.e pay a part of the total health service cost), while the un-insured paid the total health service

cost. Copayment may be a motivation to visit the hospital. This finding is supported by Liabsuetrakul and Oumudee (2011), who found that having health insurance influenced the insured to seek care, reach a hospital, and receive care early; implying that Health insurance has a significant positive impact on utilization of health services by the insured. Also supporting this finding is Akande and Salaudeen (2011), who found that the mean clinical attendance per month for check-ups increased significantly with the implementation of NHIS. They found that NHIS led to a forty four percent increase in the utilization of health services. Similar reports have been documented by Ansah et al. (2009), who found that removing out-of-pocket payments for healthcare services resulted in an increase in hospital visits (healthcare utilization). The finding could also be explained from the view that the un-insured probably do not subscribe to orthodox-western medicine as a desired form of healthcare or health promotion method. Also, a similar argument have been recognized and documented by Bleich, Özaltin and Murray (2009), who noted that individuals in need of health services tend to patronize that form of healthcare which is in line with their tradition and belief system. Further supporting the finding of the present study is Agba, Ushie and Osuchukwu (2010), who found a significant difference in access to healthcare (utilization) between the insured and the uninsured. Based on their findings they concluded that insured federal civil servants had better access to healthcare services (Utilization) than the uninsured federal civil servants.

In contrast with the finding of the present study, is Ujunwa, Onwujekwe, and Chinawa (2014), who found that majority of insured and non-insured respondents had good access to healthcare services (utilization). Based on their findings, they concluded that the NHIS-insured civil servants have no appreciable advantage in terms of access and utilization of health services in Enugu metropolis. The discrepancy in findings could be explained by demographic

differences between their study and the present study. Majority of the respondents in their study had tertiary education. This differs from the profile of respondents used for the present study where majority of the respondents had secondary education. Also, in contrast with this finding is Decker, Doshi, Knaup and Polsky (2012), who showed that individuals who were uninsured before age 65 did not utilize healthcare services differently after they had become insured.

Differences in Healthcare cost of the insured and uninsured federal civil servants

The study found that majority of the insured federal civil servants had low healthcare cost, while majority of the un-insured federal civil servants had high healthcare cost. The study further found a significant difference in healthcare cost (out of pocket payments for healthcare services), where healthcare cost was found to be better (lower) among the insured federal civil servants compared with the un-insured federal civil servants. The modal out-of-pocket Healthcare cost by the insured was 1000 ñ 3000 naira for medicine and 600 ñ 1000 naira for diagnostic tests; whereas the modal out-of-pocket Healthcare cost by the un-insured was 3000 ñ 5000 naira for medicine and 1000 ñ 3000 naira for diagnostic test. The modal out-of-pocket Healthcare cost by the insured was by half lower than the modal out-of-pocket Healthcare cost by the un-insured. This finding could be explained by the postulation that out-of-pocket payments without reimbursements constitute the most commonly used method of payment for healthcare services by the un-insured (Rogers, 2012). The un-insured are more likely to pay out-of-pocket user fees without reimbursements at point of care for health services obtained or consumed (Spreeuwiers & Dinant, 2015). The insured pays only a fraction of their medical bill on out-of-pocket basis. This therefore offers some degree of financial protection against catastrophic expenditure on healthcare services. This agrees with reports by Spaan et al. (2012), who noted that insurance with copayments offers financial protection to enrollees.

The finding of the present study with regard to healthcare cost is not supported by the findings of Ujunwa, Onwujekwe, and Chinawa (2014), who found no significant difference in healthcare cost between the insured and the un-insured, where the average healthcare cost per month for the insured was 1,859 and 2,157.45 for the non-insured. They concluded that the NHIS-insured civil servants have no appreciable advantage in terms of expenditure on healthcare services in Enugu metropolis. Further contrasting the finding of the present study is Decker, Doshi, Knaup and Polsky (2012), found that there is no significant difference in healthcare cost based on insurance status. In their study, the respondents had statistically similar healthcare costs before insurance and after insurance. This discrepancy may be explained by the differences in socio-demographic profile of the respondents used in the study.

Differences in satisfaction with healthcare services received by the insured and uninsured federal civil servants

The study found that majority of the insured federal civil servants had good satisfaction with healthcare services, whereas majority of the un-insured federal civil servants had poor satisfaction with healthcare services. The study further found a significant difference in satisfaction with healthcare services between the insured and the un-insured civil servants. The insured and un-insured had poor satisfaction with healthcare staff attitude. This may be connected to a psychological response to the harsh conditions in which the healthcare staff works. Dissatisfaction with work conditions could result in poor worker attitude towards his job (Naidu, 2009). The insured and un-insured had poor satisfaction with waiting time. This may be related to the large number of clients/ patients who visit the hospital in need of healthcare services. The insured had good satisfaction with availability of medication while the un-insured had poor satisfaction with availability of medication. This may be associated with the idea that

with the presence of insurance with copayment the insured are probably able to afford the rather expensive medication from the healthcare provider. On the contrary, the un-insured may not be able to afford the rather expensive medication. The insured and un-insured had poor satisfaction with process of accessing healthcare. This may be associated with the long waiting time due to the large number of clients/ patients who visit the hospital in need of healthcare services. This finding is supported by Mohammed, Mohammad, and Dong (2011) who found that the insured were moderately satisfied with provided healthcare services within the NHIS compared to the un-insured. Furthermore, this finding is also supported by Iliyasu, Abubakar, Abubakar, Lawan, and Gajida (2010) who found that the uninsured are highly satisfied with provided healthcare services compared to the uninsured.

The finding of the present study with regard to satisfaction with healthcare services is not supported by Dalinjong and Laar (2012) who found that satisfaction with healthcare services is significantly similar between insured and uninsured groups. This discrepancy may be connected to the internal peculiarities of the Ghanaian Healthcare system where the study was carried out as opposed to the Nigeria healthcare system.

Limitation of the Study

The weaknesses or threats to the validity of this study include:

- Sampling procedure: a purposive sampling technique do not allow for proper randomization of the respondents. This may affect the generalizability of the findings.
- Sample Size: The population size was not definitely known, an assumed effect size was used to calculate sample size using power analysis table. The calculated sample size may be too small to make a concrete meaningful generalization.

- **Time maturation Factor:** The recall time for the administered questionnaire was 2weeks and respondents were allowed to fill the questionnaire at their chosen time and place. This may have affected the generalizability of the findings.
- **Third-party influence:** Since respondents were allowed to fill the questionnaire at their chosen time and place. The likelihood that an input from an individual other than the respondent may have biased one or more responses on the questionnaire. This may have affected the responses to the questionnaire items.

Implication of the findings

The findings of this study would imply that

- Nurses may need to lure more and more of the un-insured Federal Civil Servants into enrollment into the NHIS as this would go a long way in improving the utilization of healthcare services.
- The makers of health policies would have to craft better designed health insurance enrollment methods to improve enrollment rate as this would further protect the population against undue out-of-pocket expenditure on health services.
- Nurses will need to add more value to their products by improving attitude towards clients/patients and cut down on client waiting time as this will boost enrollees's satisfaction with healthcare services, hence act as an incentive to enrollment into the NHIS.

Summary of the study

In Nigeria, the National Health Insurance Scheme (NHIS) is the major Social Health Insurance plan for a major section of the Nigerian population. The purpose of this study is to analyze comparatively, the healthcare cost and utilization of healthcare services by the insured and uninsured federal civil servants in Abakaliki Ebonyi State. The objective of the study was to compare the healthcare service utilization, healthcare cost and satisfaction with healthcare services among the insured and the uninsured federal civil servants in Abakaliki Ebonyi State under the national health insurance scheme. A comparative descriptive cross-sectional design will be used for the study. The total sample size was 216, comprising of insured federal civil servants and uninsured federal civil servants. A multi-stage sampling procedure was employed for this study. The instrument for data collection was a researcher developed questionnaire. A total of 186 copies of the administered questionnaire were retrieved at deadline; hence a return rate of 86%. The study found that majority of the insured federal civil servants had poor utilization of healthcare services. Majority (84.7%) of the insured federal civil servants had poor utilization of healthcare services. Majority (98.4%) of the un-insured federal civil servants had poor utilization of healthcare services. There was significant difference in early visit to hospital (access to Healthcare) between the insured and the un-insured federal civil servants ($p < 0.05$). Nevertheless, there was no significant difference in Healthcare utilization between the insured and the un-insured federal civil servants ($p > 0.05$). Majority (33.9%) of the insured federal civil servants paid an out of pocket sum of between 1000 ï 3000 naira for medicine. Majority (38.7%) of the insured federal civil servants paid an out of pocket sum of between 600 ï 1000 naira for diagnostic test. Majority (30.7%) of the un-insured federal civil servants paid an out of pocket sum of between 3000 ï 5000 naira for medicine. Majority (46.7%) of the un-insured federal civil

servants paid an out of pocket sum of between 1000 ÷ 3000 naira for diagnostic test. There was a significant difference in Healthcare cost between the insured and the un-insured federal civil servants ($p < 0.05$). The insured respondents generally had good satisfaction with healthcare services [mean 2.7(0.5)]. The un-insured respondents generally had poor satisfaction with Healthcare services [mean 1.7(0.4)]. There was significant difference in satisfaction with Healthcare services between the insured and the un-insured civil servants ($p < 0.05$).

Conclusion

This study hereby concludes that there is no significant difference in Healthcare utilization between the insured and the un-insured. There is a significant difference in Healthcare cost between the insured and the un-insured. There is a significant difference in satisfaction with Healthcare services between the insured and the un-insured civil servants.

Recommendation

It is recommended that:

- A well structured federal civil service employment process be instituted such that enrollment into the NHIS would be part of the statutory requirements for employment into the Federal Civil Service.
- Regular update of enrollees within the federal civil service is encouraged.
- Public enlightenment programmes on the operations of the NHIS be intensified.
- Training and retraining of healthcare service providers on the operations of the NHIS is regularly done.

- The government should empower the operators of the NHIS with benefit packages with which to attract investors.
- Decentralized chain of command within the NHIS be put in form to reduce enrollment bottlenecks.

Suggestion for further Studies

The following are suggested for further study:

- Comparative healthcare cost between the private sector and the public sector servants.
- Comparative utilization and satisfaction with healthcare services between urban and rural based enrolees of the NHIS.
- Comparative healthcare cost between insured and un-insured local government civil servants.

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18 August 2015

Dear Respondent,

I am a post graduate Nursing Sciences student of the University Of Nigeria Enugu campus. I am conducting a research study on the Comparative Healthcare Cost and Utilization Of Healthcare Services by The Insured And Uninsured Federal Civil Servants in Abakaliki-Urban, Ebonyi State, Nigeria. This study, which is self sponsored without any competing interests, may enable nurse professionals to better meet the health needs of clients in different age groups. Would you please assist us in this study by completing the enclosed questionnaire? Your opinion and experiences are very important to us, and are needed to give an accurate picture of your perception.

The questionnaire is given at random. The questionnaire is completely anonymous, so you are not asked to put your name on it. I hope, therefore, that you will feel comfortable giving your honest opinions. If you prefer not to answer any question for personal reasons, feel free to leave it blank.

Your participation in this study is completely voluntary. By returning your study booklet, you will be granting your consent to participate in the study.

Thank you in advance

Nwafor-Festus Jane

Appendix i
Research Questionnaire

Comparative Healthcare Cost and Utilization of Healthcare Services by the Insured and
Uninsured Federal Civil Servants in Abakaliki-Urban, Ebonyi State, Nigeria.

INSTRUCTION: Please write, circle or tick (✓) a response as applicable

Section A: Socio-demographic description

1. Age é é é é é é é é é é ..

2. Gender male ☐
 Female ☐

3. Marital Status single ☐
 Married ☐
 Divorced ☐
 Separated ☐

4. What is your highest completed educational qualification? Primary ☐
 Junior secondary ☐
 Senior secondary ☐
 Tertiary ☐

5. Are you insured under NHIS? Yes ☐
 No ☐

6. How many of the members of your household are insured under NHIS? é é é é é é

7. How many of the members of your household are not insured under NHIS?.....

Section B: INSTRUCTION: Please circle or tick (✓) a response as applicable

Health service Utilization

8. Have you or any member of your household experienced any illness in the past 3months?

a. Yes —————> Continue with question 9

b. No —————>

9. Did you visit the hospital for treatment?

a. Yes —————> Continue with question 10

b. No —————> Skip to question 11

10. At what stage did you visit the hospital?

a. More than 4 days after the illness began

b. 4 days after the illness began

c. 3 days after the illness began

d. 2 days after the illness began

e. 1 day after the illness began

11. How many times did you visit the hospital for routine checkup care in the past 3 months?

a. None

b. Once

c. Twice

d. Three times

e. More than three times

Expenditure on Healthcare

12. Do you or members of your household pay for registration where you often go for healthcare?

- a. Yes —————> Continue with question 13
- b. No —————> Skip to question 14

13. How much do you pay in Naira for registration?

- a. 100-500
- b. 600-1000
- c. 1001-2000
- d. 2001-3000
- e. Above 3000

14. Do you or members of your household pay for out-patient visits or consultations?

- a. Yes —————> Continue with question 15
- b. No —————> Skip to question 16

15. How much do you pay in Naira per visit?

- a. 100-500
- b. 600-1000
- c. 1001-2000
- d. 2001-3000
- e. Above 3000

16. Please estimate how much you have spent on medicine/drugs within the past 3months?

- a. 100-500
- b. 600-1,000
- c. 1,001-3,000
- d. 3,001-5,000
- e. Above 5,000

17. Please estimate how much you have spent on diagnostic tests within the past 3months?

- a. 100-500
- b. 600-1,000

- c. 1,001-3,000
- d. 3,001-5,000
- e. Above 5,000

18. How do you pay for medical treatment obtained by you and members of your household?

- a. Total insurance without copayment
- b. Insurance with copayment (you pay a stipulated percentage of the total cost)
- c. Out-of-pocket cash payment with reimbursement
- d. Out-of-pocket cash payment in installments without reimbursement
- e. Out-of-pocket cash payment without installments without reimbursement.

Satisfaction

How satisfied are you with your healthcare provider?

No.	Satisfaction with...	Not satisfied at all	Rarely satisfied	Just Satisfied	Moderately Satisfied	Highly satisfied
19	Staff attitude					
20	Waiting time					
21	Availability of medication					
22	Process of accessing healthcare					

Appendix ii

POWER ANALYSIS TABLE

SOURCE: (Polit & Beck, 2012)

POWER	ESTIMATED POPULATION CORRELATION COEFFICIENT (ρ) [*]										
	.10	.15	.20	.25	.30	.35	.40	.50	.60	.70	.80
.60	489	217	122	78	54	39	30	19	13	9	7
.70	614	272	152	97	67	49	37	23	16	11	8
.80	785	347	194	123	85	62	47	29	19	13	10
.90	1047	463	258	164	112	81	61	37	25	17	12
.95	1296	575	322	204	141	101	80	50	32	22	18

^{*}Estimated effect size (r) is the estimated population correlation coefficient (ρ)

POWER	ESTIMATED EFFECT SIZE (d) [†]										
	.10	.15	.20	.25	.30	.35	.40	.50	.60	.70	.80
.60	979	435	245	157	109	80	62	40	28	20	16
.70	1233	548	309	198	137	101	78	50	35	26	20
.80	1576	701	394	253	176	129	99	64	44	33	25
.90	2103	935	526	337	234	172	132	85	59	43	33
.95	2594	1154	649	416	289	213	163	105	73	53	41

Appendix ii

RELIABILITY ANALYSIS

Tool: MS-Excel 2007 statistical calculator

Pilot respondent	Total pre-test score	Total post-test score
1	80	74.6
2	87.3	70.9
3	34.6	27.3
4	58.2	61.8
5	36.4	41.8
6	25.5	27.3
7	12.7	16.4
8	81.8	70.9
9	74.6	65.5
10	30.9	25.5
11	38.2	30.9
12	29.1	34.6
13	30.9	27.3
14	20	16.4
15	65.5	56.4
16	10.9	16.4
17	76.4	83.6
18	72.7	78.2
19	45.5	41.8
20	58.2	60

Pearson Product Moment Correlation table

	<i>Total pre-test score</i>	<i>Total post-test score</i>
Total pre-test cost score	1	
Total post-test cost score	0.962297	1