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UNIVERSITY OF GHANA

HEALTH INSURANCE STATUS AND CLIENT PERCEPTION OF QUALITY OF CARE AT KWAHU GOVERNMENT HOSPITAL

BY

TABIRI OPOKU

(10308885)

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

JULY, 2018
DECLARATION

I, the undersigned student, declare that this study is my original work which was carried out at the Department Health Policy, Planning and Management, School of Public Health, College of Health Sciences, University of Ghana and that, apart from the literature review that have been duly acknowledged in here, this work has never been presented either whole or in part by anyone to any institution or school for the award of any other course or degree qualification.

I also reaffirm that all sources of materials used and consulted in the course of this study have been duly acknowledged.

............................... Date.................................

TABIRI OPOKU

(STUDENT)

(10308885)

............................... Date.................................

DR. JUSTICE NONVIGNON

(SUPERVISOR)
DEDICATION

This study is dedicated with due reverence to my good Lord and savior Jesus Christ, my counselor, by whose great grace and power I have been able to accomplished this work.

To my beloved mother, Kyeraa Christiana and siblings. My sincere gratitude and appreciation go to Miss Esther Frempong for support and word of encouragement.

Finally, the entire staff and student of the School of Public Health, University of Ghana, Legon and my hardworking supervisor Dr. Justice Nonvignon.
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LIST OF ABBREVIATIONS

ANC  Antenatal Clinic
GHS  Ghana Health Service
MOH  Ministry of Health
NHIA National Health Insurance Authority
NHIS National Health Insurance Scheme
OPD  Out-Patients’ Department
PNC  Post-natal Clinic
QA   Quality Assurance
QI   Quality Improvement
WHO  World Health Organization
DEFINITION OF TERMS

**Assurance:** The attitude of staff and possession of enough knowledge and skills to provide good care to clients.

**Client:** Patients who assess care in the health facilities.

**Communication:** Giving information to the clients about their health condition and treatment.

**Empathy:** Caring and individualized attention provided to clients.

**Insurance status:** Insured and uninsured client.

**Perception:** Client opinion of healthcare received from the health providers.

**Provider:** Health staff.

**Quality of care:** How client perceived quality of care

**Reliability:** The capacity to do scheduled services correctly.

**Responsiveness:** How the health care provider treat the clients to meet their legitimate non-health expectations. Willingness of the provider to assist clients and provide prompt service.

**Tangible:** Physical facilities, equipment and appearance of personnel.

**Type of visit:** Whether the client’s visit is an initial visit or follow up visit.
ABSTRACT

Background: The National Health Insurance Scheme was introduced in Ghana in 2003 to improve access to healthcare through financial risk protection. Since then, quality of care received by clients of the scheme has dominated public debates. This study examined client’s perception of healthcare quality based on their NHIS status at Kwahu Government Hospital.

Method: The study used descriptive cross-sectional design and questionnaires were used to collect data from 118 respondents who were selected through simple random sampling. Descriptive statistics, tables, pie charts, mean, and standard deviation were employed to describe respondent’s socio-background, and health insurance status. In order to analyze the respondent perception of quality, student t-test was employed to analyze data.

Results: The result of the study indicated that categories of respondents perceived service quality to be average. Further, clients perceived individual attention provided by health worker as most important to them while appearance of the hospital environment (neatness) was of least important. There was statistically significant difference between perception of quality between insured and uninsured clients.

Conclusion: Overall, clients expected better quality of health services than what they actually received. Moreover, the specific indicators for the major components of the SERVQUAL model of quality of care had little difference in healthcare in reference to their NHIS status.
CHAPTER ONE

INTRODUCTION

1.1 Background

The implementation of the NHIS in Ghana has improved the rate citizens and non-citizens make good uses of various healthcare institutions in all parts of the nation. As at 31st December, 2015, active membership of NHIS has increased from 39% (10,545,428) to 41% (11,341,021) in 2014 and 2015 respectively. This 41% of total NHIS members form estimated population of 27,670,174 in 2015 (NHIA, 2015). The core intentions for the setting up of the NHIS in Ghana were to enhance, increase, and provide affordable healthcare and more especially quality health service delivery to all members with valid NHIS card at various accredited health institutions (National Health Insurance Authority, 2010).

In spite of high level participation of this social policy, the kind of services provided by these accredited health institutions have been reported on several occasions most especially the quality of care received by clients or patients (Ghana Health Service, 2009). Studies have identified verbal abuse of patients by hospital workers, patients not adequately physically examined by doctors, patients with valid NHIS cards have to wait over long periods of time before they receive health care and unfair treatment given to insured and uninsured patients by health service providers (Bruce, Narh-Bana, & Agyepong, 2008). If these challenges are really true and still ongoing, it has the possibility of collapsing or reducing the number of people willing to join the program.

Studies in developing countries have examined perceptions of quality of care from the perspective of patients in general, regardless of their insurance status (Baltussen, Bruce, Rhodes, Narh-Bana, & Agyepong, 2006), or only insured patients (Atinga, 2012). A few of
the comparative studies did not place emphasis on the problem of favouring between insured and uninsured patients (Jehu-Appiah, Aryeetey, Agyepong, Spaan, & Baltussen, 2012): (Dalinjong & Laar, 2012). This study seeks to fill this gap by comparing perceptions of quality of care between insured and uninsured patients in order to establish whether there are any differences.

1.2 Problem statement

The service provider’s demeanor in the course of providing care to the customer can help to measure the level of quality of care each customer received when seeking for healthcare in both public and private health facilities in Ghana. Unacceptable conducts of service providers like poor communication, delay in responding to patient’s needs and requests, failure to providing and performing healthcare service as scheduled could frighten or deter customers from visiting the same health facility to seek medical or health care when the need arises.

The Ghana Health Service as part of its drive to make health service accessible to people and improve quality of care put together a policy document on quality assurance. The national health policy document reveals that some of the health facilities are efficient in delivering high quality services and being responsive to the needs of their clients but may not be performing up to the satisfaction of their clients (Ghana Health Service, 2007). Studies conducted in Ghana either examine the quality of healthcare only from the medical, technical or client-perceived perspectives comparing the two dimensions based on their health insurance status (Atinga, 2012). Some other researchers conducted in Ghana and other developing countries mainly focused on patient perception/ satisfaction variable to ascertain the quality of health care (Alhassan et al., 2015).
The study measured and compared expectations and perceptions of healthcare quality among clients with and without valid health insurance at Kwahu Government Hospital, Eastern region of Ghana.

1.3 Research Questions

1. What is the level of expectation of clients on service quality provided by healthcare institutions based on their health insurance status?

2. What are the perceptions of clients with or without valid NHIS on quality of services received?

3. What are the differences in perception of health service quality among insured and uninsured clients?

4. What are client’s perceived important features of health services among those with or without NHIS?

1.4 General objectives

The general objective of this study was to assess client’s perceptions of quality of healthcare at the Kwahu Government Hospital based on their NHIS status.

1.5 Specific objectives

1. To determine the level of expectation of clients with or without valid NHIS card on healthcare quality provided by health care providers.

2. To determine insured and uninsured client perceptions on quality of service received.
3. To determine the difference in perceptions of health service quality among clients with or without valid NHIS.

4. Identify client’s perceive important features of health services among those with or without NHIS.

1.6 Justification of the study

This study will describe and compare clients with or without valid NHIS card perceptions and satisfaction with health care as a means of measuring quality of health services at the Kwahu Government Hospital, Atibie. In addition to evaluating client’s perception and satisfaction with health services and it will also elicit information about areas that need massive improvement. It will also bridge the gap between client’s perceptions, expectations and actual services they receive. Seeking opinion of insured and uninsured patients will ensure client focus in service delivery. This will make it more relevant in ensuring high level of quality service delivery.

This research will assist the health facility to initiate policies and programs that will lead to improvement in client-provider relationship which will result in increased utilization of healthcare services regardless of patient’s insurance status and revenue generation.

1.7 Conceptual framework

Figure 1 show the expectations and perceptions of the patient can be ascertained or measured by using the SERVQUAL model. The comparison of patient health insurance status and their expectations and perceptions of quality of health service delivery. Patients assess the health care input and output base on their health insurance status to determine the quality of service received and their satisfaction.
This study used the SERVQUAL model with 22 questions classified into five, empathy, reliability, assurance, tangibles and responsiveness, examining the expectations and perceptions of an institution from their customers in terms of service quality. The expectations and perceptions of patients were registered by the use of five-point Likert scale. The five dimensions investigated by the proposed study includes:

**Tangibles**: This aspect of the dimension takes into consideration the physical appearance and the surroundings of the health institution. The internal and external infrastructural outward look of the hospital appears in their uniforms and other factors are also taken into consideration in terms of measuring the tangibility of an institution like the hospital. It also measures tools, materials and equipment used to operate in the hospital.

**Responsiveness**: The health care quality or service can be measured based on the willingness and how quick the staff of the institution or hospital responds to the needs and wants of patients when requested. How prompt their needs are responded gives them the impression of the kind of service they receive from their providers. Do health service providers perform their responsibilities to their customers as scheduled?

![Conceptual framework measuring quality of healthcare based on health insurance status](http://ugspace.ug.edu.gh)

**Figure 1**: Conceptual framework measuring quality of healthcare based on health insurance status
Reliability: This category of measuring service quality, examining capabilities of health care providers to deliver health services as agreed between the patient and the provider. It takes into account the reputation, loyalty, skillfulness, reliability, dependability, and persistence of the service provider in the course of providing health care service to their patients. How patient data are being taken care of in the hospital setting is one of the means of measuring service quality.

Assurance: Another way of measuring the expectation and perception of quality health care which takes into consideration the attitude of the work force, the possession of adequate knowledge and skills to offer quality services to their customers. Do the staffs of the hospital receive recognized and accredited training in order for patients to have confidence in them with the kind of services they give them?

Empathy: This section also assists to measure how the customers perceive service as individual centered in the course of receiving health care. Do health service providers pay attention to each patient’s health needs and response to their request on time? The clarity of treatment communication between the provider and the customers. Providing explanation to the understanding of patients before performing any treatment.

As explained already, the dimension of service quality will determine the perceived quality of health care and patient satisfaction of service quality provided by the health service provide
CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section seeks to explore other researches and studies in line with the research topic, health insurance status and quality of care. It shall also be categorized into the following subheading; health care financing, health care in Ghana, health insurance in Ghana and measuring of quality of care and patient’s perceptions.

2.1 Defining and measuring of quality of care

Measuring and defining quality of care or health service quality is very challenging due to individual interest, level of knowledge, and understanding of health care system, perceptions, and their expectations from the service providers. This issue is quite difficult to define as a result of sophisticated and wider network of the health system globally and the stakeholders interest in the health care (Donabedian, 2003). Therefore, when one is defining and measuring service quality, it should comprise of all the dimensions of health care or services in order to factor in the expectations and perceptions of customers or stakeholders. Quality of health care is the performance (according to standards) of interventions that are known to be safe and affordable to the society in question and impact positively on morbidity, disability and mortality (Ghana Health Service, 2007).

There is no clear distinction in measuring quality of care because different models or frameworks are used to measure the service quality that makes it more difficult as its definition. Examples of models that have been proposed to measure quality of care includes; WHO model, SERVQUAL model, Bamako initiative, Donabedian framework, technical and
functional model etc, these proposed have different ways or dimensions of assessing service or care quality (Donabedian, 1980).

The evaluation of quality of care by WHO takes into consideration only three factors which includes responsiveness, financial fairness and optimal health (Evans, Edejer, Lauer, Frenk, & Murray, 2001). The Bamako initiative of health care quality assessment developed in the mid-1980, evaluates health service quality from economic perspective which comprises of equity, effectiveness, efficiency, and sustainability of health care (Knippenberg et al., 1997).

Donabedian framework of measuring of quality of care considered three (3) cardinal factors namely structure, process and outcome. The structure consists of every environment where clients or customers receive care, thus, infrastructure, workforce, and structures within the organization. The process in this content refers to the care provided to customers. The outcome in this model made of effect of service or care received from the structure through the process (Donabedian, 1980;1988)

Technical and functional model factors into two main issues when considering measurement of quality of care. These include technical and functional quality. The functional aspect of this model looks at the actual impact of the care patient received from their providers and technical aspect also explores the model of service provision by following the right procedures, the competencies and skills of the health care staff (Groenroos, 1984).

2.2 Healthcare service quality

Bakar, Akgun, & Al Assaf, (2008) proposed that the health care service quality takes into account two main aspects of health care quality; the clinical quality and service quality. The standard protocols and procedures used by the health care providers comprise the clinical quality of care. The skills, competencies, and accuracy of diagnosing diseases and methods of
treatment. The service quality also captures services like provider’s relationship with their customers in terms of communication, interpersonal relationship, appearance of service providers as well as infrastructure, equipment, materials and other resources available in the health facilities to meet customers’ needs.

This model argued that health care quality should be assessed by the customer based on their expectations and perceptions of the care they received from their providers. The SERVQUAL framework points out that the best way of measuring quality of care falls between customer’s expectations and perceptions. The model used tangibles, empathy, assurance, reliability, and responsiveness as the five dimensions to evaluate the service quality (Parasuraman, Zeithaml, & Berry, 1988). Globally, the SERVQUAL model has been used to evaluate the quality of health care quality (Taner & Antony, 2006; 2009; Owusu-Frimpong & Dason, 2010; Peprah, 2013; Goncalves, Biscaia, Correia, & Diniz, 2014).

This model was used by the researcher to evaluate the health insurance status and client’s perception of quality of health care. The model assisted the researcher to compare the expectations and perceptions of the patients on the basis of their health insurance status.

2.3 Healthcare and financing in Ghana

In Ghana, the health service delivery is the mixture of public and private sectors. The private sector has been categorized into private-for-profit and private-not-for-profit. The state owned institutions are ranked according to their level of competencies, capacities or limit of health care services they can offer. Thus from Community-Based Health Planning and Service (community level), health centers at sub-districts, district hospitals which are normally located at district administrative capitals, regional hospitals in each regional capital and teaching hospitals.
Some of the challenges faced by the health service provision in Ghana includes; inadequate skillful workforce, poor distribution of health staff, inadequate sources of funds to sustain health care financing, unacceptable attitudes of health care personnel, and delayed reimbursed funds coming from the side of National Health Insurance Authority (Ministry of Health, 2007). To make health service easily accessible and services received by customers more standardized, the Ghana Health Service, one of the agencies under the ministry of health has developed policy document on quality assurance to ensure patients receive better health care from their providers. Its five year Quality Assurance strategic plan (2007-2011) consists for safe, quality clinical care and patient centered health delivery (Ghana Health Service, 2007).

The National Health Insurance Scheme (NHIS) was officially set up under the National Health Insurance Act, Act 650 in 2003 by the parliament of Ghana. The prime aim of the introduction of social policies in Ghana was to promote health in the form of open greater access to at least primary health care abolished self-health care financing so that the needy in the society can get access to health services without financial without financial serving as a barrier to access health care in Ghana (Abuosi, Domfeh, Abor, & Nketiah-Amponsah, 2016).

The NHIS Act permits or authorizes the establishment of public, private, and private commercial health insurance scheme in Ghana. The NHIS benefit package has been well coded in the Act 650 which includes out patient, and in-patient services at primary and secondary health care level as well as transfer and emergency services. The service package covers almost 95% of common ailments in Ghana. Examples include: malaria, hypertension, diabetes, cervical and breast cancers, minor surgeries, maternal health etc (NHIS, 2010).

The law also allowed the district mutual health insurance scheme to expand service packages the scheme could offer to their members. Due to unequal financial resources in the country,
the NHIS Act established the certain group of people like the poor vulnerable in the society as well as individuals who are less than 18 years old and people above 70 years and above are excused from payment of NHIS premium (Gobah & Author, 2011).

The establishment of NHIS brought about high demand of health service without much efforts to strengthen the health inputs such as human resources, infrastructure, equipment and materials to meet service demands. SEND (2010) reported that, the number of medical doctors reduced from 32 to 26 between 2006 and 2008 in the northern region of Ghana whereas the NHIS membership drastically moved from 281, 7775 to 828,805. Research has shown that patients without valid NHIS cards get better treatment as compared to those with valid NHIS cards. Likewise, the Citizens Assessment (2008) report that, half of the participants who took part in household survey and patient exist survey perceived insured patients to get better treatment than uninsured patients and 20% of the respondents think otherwise (The National Development Planning Commission, 2009).

In order to affirm the health service quality in Ghana by health facilities both public and private, the NHIA has sole responsibility to grant accreditation to these health care institutions before they can provide health services to its members. These include regular assessment of their facilities to ensure that pre-establishment criteria are met before certificate will be issued to provide services to NHIS card bearing members (National Health Insurance Authority, 2010).

The reputation of NHIS accredited members in terms of quality of health care are of good reasons. First of all to retain existing members and secondly to attract other people who are not NHIS members to have interest and register for NHIS because of the quality of services its accredited members provide to their customers (Gajate-garrido & Owusua, 2013).
2.4 Client expectations and perceptions of healthcare

There are limited studies on literature associating health insurance status and quality of care. However, a lot of scientific health research indicated that, the outcome of health service quality has positive relationship with the health insurance scheme (Witter, S., & Garshong, 2009). A study conducted to compare the distribution of the national Latino people perceived quality of care with different subgroups, reviewed that, those with valid health insurance gave a score of 70% as good (Perez, Ang, & Vega, 2009).

A focus group discussion with health care professionals at ASHWINI hospital, India, indicated that, sessions of clients who receive medical and other forms of treatment at the above health facility reported that, nurses’ attitude towards patients without valid health insurance were below expectation as compared to professionalism or code of conduct pertaining to their profession. The interpersonal relationship even among patients who seek health care with health insurance were unequal in that very health institution.

Research conducted in the Nouma district in Burkina Faso and the core mandate was to evaluate the community based insurance. The report revealed that, provider mostly failed to perform their responsibilities such as weighing and taking vital signs of their customers, systemic physical examination and give feedback to patients about their diagnosis (Robyn, Sauerborn, & Bärnighausen, 2013).

Another study by a group of researchers in India about community micro-insurance the enrollment of health insurance assured significant improvement of care showed that the health insurance status does not grant or warrant excellent health care given to patients with all things being equal to allow the health system to function independently. Patient’s perceptions of quality of care in public health institutions and private health facilities are different (Yesilada & Direktör, 2010). Bassili et al., (2000), reported in their research
conducted in Africa and more specifically Egypt showed that, insured patients enjoyed extensively more and essential health service than uninsured counterparts in the same hospital.

In attempts to measure health care quality, different or several models or frameworks are available to use as stated earlier in the literature review. This study chose to use SERVQUAL model to measure the health care quality on the grounds of patients’ health insurance to verify the association between their perceptions and expectations of quality of care.

The SERVQUAL model was used in Poland as a tool for measuring health service utilization and the results indicated that, the participant’s expectations were high in the five (5) aspects of the model except the assurance was mostly rated higher as compared to other dimensions of the framework (Manulik, Rosinczuk, & Karniej, 2016).

This very model was used in Cyprus and the outcome of the research show customers rated higher on their dissatisfaction with the care given in the country. Therefore, the participants indicated that the appearance, interpersonal, competencies, accuracy, responses of the providers are much essential to them (Yesilada & Direktör, 2010). In Bahrian, Ramez (2012) research results showed that the dimension of the SERVQUAL model specifically empathy, tangibles, and reliability were the biggest indicators of quality of care.

The SERVQUAL framework employed in the study conducted in Bandar Abbas Shadid Mohammed Hospital revealed that the facility lacked all the five aspects of service quality measurement tools. However, over 50% of the research participants rated the service quality to be within the normal ranges.

Locally, most researchers have used this quality of care model in several health facilities to ascertain the level of service quality. They include; (Turkson, 2009); (Atinga, 2012). The conclusion report of (Turkson, 2009) showed that general quality of care in the rural or
deprived communities in Ghana perceived it to be high though certain dimensions of the model were below average or expectation.

Abuosi et al. (2016) examined the perception of patients in regards to quality of care received base on their NHIS status showed that there was no difference in quality of care enjoyed by their customers base on the NHIS status and respondents also rated service quality as good in the health facilities across the nation.

In the year 2008, a research conducted about the perception of care among Latino population in United State of America revealed that the communication between healthcare providers and their customers were very poor. 82% of those who participated in the study and valid health insurance and had regular access to health services rated the perceptions of healthcare as high as compare to 74% of uninsured clients. Those with higher educational background and insured scored service quality as high as compare to those with lower educational background (Perez et al., 2009).

Baku (2007) reported that the interpersonal relationship between health professionals and their customers was not up to expectation as communication was poorly rated.

2.5 Conclusion

The reason of the review was to assist to comprehend the different and similar aspect of healthcare quality. Numerous studies on quality of healthcare that concentrated particular attention on service quality dimension as proposed by SERVQUAL model. Many of these studies report that, the general public have rated healthcare quality as satisfactory or average. However, certain aspect of the dimensions of the care such as assurance, reliability, empathy and responsiveness have not seen significant improvement to meet client expectations and perceptions specifically in the public institutions in Ghana and focus on regional level.
However, the study pay much attention on clients who are daily users of the chosen health facility. Studies on district hospitals are limited and the perception of the clients are also limited.
CHAPTER THREE

 METHODOLOGY

3.0 Introduction

This section deals with all the methods used in gathering data from the field of study. It presents with a description of the research setting, target population, sampling technique, and size calculation, the data gathering tools, data gathering procedures, the research design, data analysis, study variables, inclusion and exclusion criteria, quality control pretesting and ethical consideration of the study.

Study design

The study design was descriptive cross-sectional. It used quantitative method and structured questionnaire to elicit information from patients on their perception of quality of healthcare base on their health insurance status.

3.1 Study setting or area

In 1954, SDA Missionaries founded the Kwahu Government Hospital and it was taken over by the state in 1974. The hospital is situated at Atibie and specifically Mpraeso-Nkawkaw road. It is one of the well-recognized hospitals in the kwahu ridge locality. The hospital provides health services to about two hundred (200) communities within its district of location and beyond. The geographical location of the hospital is surrounded by road networks, making the hospital the major referral point for all clinics, hospitals, public and private in kwahu.
The hospital provides 24 hours specialist and general services on both out-patient and in-patient basis. Currently, the hospital provides a wide range of services to its customers which include: Medical care, General Surgery, Obstetrics and Gynaecology, Paediatrics, Reproductive and Child Health Care/ Family Planning, Accident and Emergency, Psychiatry, Dental, Eye, Mortuary. The hospital runs 24 hours and provides needed health services to its cherished customers with an average weekly attendance of one thousand five hundred (1500) patients. The hospital has a bed capacity of 75.

Kwahu Government Hospital currently operates under the staff strength of 250 both clinical and non-clinical staff.

3.2 Study population

The study population consisted of all clients who attended out-patient department (OPD) and antenatal and postnatal clinic clients in the selected health facility who were eligible to be included in the study. Antenatal and postnatal clinic clients were included to ensure that all users of selected health facility will have equal opportunities to participate in the study.

3.3 Inclusion Criteria

All users of Kwahu Government Hospital aged 18 years and above and who attended general Out-Patient Department and antenatal clinic and postnatal clinic at the facility were included in the study.
3.4 Exclusion criteria

All clients below 18 years, deaf and dumb, mentally retarded, semi-conscious, unconscious, disorientated to the hospital environment were excluded from the study.

3.5 Study variables

The study measured dependent and independent variables to determining healthcare quality.

3.6 Dependent variable

The dependent variable of the study was the client’s perceived quality of care.

3.7 Independent variables

The study independent variables consisted of the following:

Socio-demographic characteristic: Client age, sex, marital status, occupation, unit visited, health insurance status, and type of visit.

Quality of care: The quality gap score between perception and expectation for each domain and total expectation and perception.
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</tr>
<tr>
<td>Educational level</td>
<td>Last institution attended: primary, JHS, SHS, tertiary or none.</td>
<td>Ordinal</td>
<td>Categorical</td>
</tr>
<tr>
<td>Health insurance Status</td>
<td>Insured or uninsured</td>
<td>Nominal</td>
<td>Categorical</td>
</tr>
<tr>
<td>Tangibles</td>
<td>Physical appearance of the hospital environment.</td>
<td>Nominal</td>
<td>Categorical</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>The willingness to help client and provide prompt services.</td>
<td>Nominal</td>
<td>Categorical</td>
</tr>
<tr>
<td>Empathy</td>
<td>To provide caring and independent care.</td>
<td>Nominal</td>
<td>Categorical</td>
</tr>
<tr>
<td>Assurance</td>
<td>The courtesy of workers and ability to inspire trust and confident.</td>
<td>Nominal</td>
<td>Categorical</td>
</tr>
<tr>
<td>Reliability</td>
<td>The ability to perform the promised services accurately.</td>
<td>Nominal</td>
<td>Categorical</td>
</tr>
</tbody>
</table>
3.8 Sample size and sampling technique

The sample size of the study was determined taking into consideration of overall mean of insured clients (81) and uninsured clients (71) for quality of care as reported by (Perez et al., 2009). The sample size for each group was given by:

\[ n = \frac{(Z_{1-\alpha/2} + Z_{1-\beta})^2 (\sigma_1^2)}{\left(\mu_1 - \mu_2\right)^2} \]

\( \mu_1 \) = mean (81) quality of care score for valid NHIS.

\( \mu_2 \) = mean (71) quality of care score for no valid NHIS.

\( Z_{1-\beta} \) = standard normal variance scale = 1.84 for 80% power.

\( Z_{1-\alpha/2} = 1.96 \) is the probability type of error setting at 5%.

Assuming power of 80%, probability of committing a type error of 5%, effective size of 10.0 and \( \sigma^2 \) is the common standard deviation of 23, assuming non-response rate of 10%, the estimated sample was 188 (insured patients, 94 and 94 uninsured patients) using the above formula.

3.9 Data collection technique

In this study, the data were collected using structured interview-administered questionnaires. This method of data collection offered the principal investigator and research assistants to help sampled participants to fill research questionnaires. The principal investigator with the help from the study assistants at least recruited about 30 study respondents to participate in the study each day visited the chosen health facility to collect data for the study.
The questionnaires were structured in line with the SERVQUAL model as developed by (Parasuraman et al., 1988). The structured questionnaire was designed with close ended questions to collect data on the expected and perceived healthcare service quality indicators. The questionnaire used Likert scale type of questions and responses. The response consisted of; 1= strongly disagree to 5= strongly agree and these applied to both the expected and the perceived healthcare.

The questionnaires consisted of three (3) sections; A, Band C. Questionnaires were administered to 188 clients with or without valid NHIS card. (98 clients with valid NHIS card and 98 without valid NHIS card).

Section ‘A’ contained questions on socio-demographic characteristics of clients or participants of this study. Section ‘B’ was on the expected and perceived healthcare dimensions (tangibles, reliability, responsiveness, assurance and empathy) and ‘C’ elicited opinions of participants about the hospital and features pertaining to the hospital and the services they offer respectively.

The study questionnaires were administered from 25th May to 7th June, 2018. On each day, the participants were divided into two (2) groups; those with valid NHIS card and those without valid NHIS card. In each group, the participants were selected by giving them numbered pieces of paper. Every 3rd number was selected for the study and their names were written down. The same manner were followed in the subsequent days until the required number of participants were achieved.

3.10 Quality control

Pretesting was done by administering questionnaires to twenty (20) patients both insured and uninsured at New Abirem Government Hospital. This was done to determine clarity of the
questions and to note ambiguity. Some of the questions were subsequently modified and all
the necessary preparations ethically needed for the study and administration of main
questionnaire were also made during the pretesting.

Field assistants with minimum qualification of first degree or higher national diploma were
trained for two (2) consecutive days to assist in data collection. The researcher or filed
assistants were closely monitored and supervised by the principal investigator to ensure
quality of data collection and to allow minimized errors that may occur in the course of data
collection.

3.11 Data analysis

The data collected from the field was checked for correctness of responses after which the
answered questionnaires were edited where necessary. The open-ended responses were
extracted and coded after which they were recorded into Microsoft Excel and eventually
moved into Software for Statistical Analysis (STATA) version 15.0.

Microsoft Excel and Software for Statistical Analysis (STATA) were the two main statistical
software employed for data analysis.

In order to measure the perceived healthcare quality for those with and without valid health
insurance, all the indicators under each service quality dimension were to summed up to get
the mean rating. For instance to measure perceived healthcare quality for tangible with four
(4) indicator and with reference to the 5-points Likert scale, and all respondents. Scoring all
the indicators for the dimension were to be 5 (Strongly agree) then the overall scoring for
tangible would be 20 (5x4). On other hand, if participants scoring were one (1) (Strongly
disagree) then the total rating would be 4 (4x1). For the purpose of interpretation of this
study, mean aggregate scoring between 4 and 12 as poor quality, scoring between 12.01 and
16 as moderate or fairly quality and scoring between 16.01 and above as high quality of healthcare. Similar method was used to measure total perception of healthcare quality, scoring between 24 -72 shows low quality of healthcare, 72.01-96 indicates average quality of care as well as scoring between 96.01-120 shows high quality of healthcare services.

The results gathered on the gender, age, occupation, health insurance, status, and educational levels were presented in tables, pie charts and bar graphs showing frequency distributions and percentages of the responses given by participants.

The mean and standard deviation ages of those with valid NHIS card and those without valid NHIS card were computed. Tests of essentials of health insurance status and perceived quality of care were performed using student t-test.

A bivariate analysis between quality of care and all other variables (age, gender, marital status, occupation, unit visited, health insurance status, empathy, reliability, assurance, responsiveness, and tangible) was initially done.

The strength of association was established looking at adjusted odd ratio (AOR) and crude odd ratio (COR) with confidence interval (CI) of 95% and independent variables with p-values ≤ 0.05 in bivariate analysis was selected in the final multiple logistic regression.

### 3.12 Ethical consideration

Authorization to conduct this research was granted by Ghana Health Service Ethical Review Committee (GHS-ERC). After this, consent was also sought form the Kwahu Government Hospital, Atibie, management team before data for this study were collected. Likewise all participants were allowed to verbalize their approval before taking part in this study. Participants were interviewed, everyone was given a consent form to read and signed. Individuals who could not read, the reasons for conducting the research were simplified to
their understanding and if they agreed to take part, their thumbprints were taken. Any information used in the research have been attributed to individuals or groups acquired from.

### 3.13 Data storage and usage

Everyone who took part in the research were given assurance that details or ideas obtained from them were precisely used for academic intentions or reasons and their privacy were taken into consideration.

### 3.14 Potential risks and benefits

Participants were made to know that the study will not have any danger or charge except their valuable time that they needed to complete the questionnaire. Participants were made to known that information provided will be used to make the necessary health policies to improve the quality of healthcare.

### 3.15 Confidentiality and anonymity

During data collection period, participants were protected since information obtained from them were perception about quality of care at the hospital. Questionnaires were given to the respondents individually.

### 3.16 Compensation

Those who participated in this study were not given anything as token for answering the study questionnaires.
3.17 Conflict of interest

The principal investigator has no personal interest in the research and the information received from study eligible participants was solely used for academic reasons.

3.18 Research and Funding

No external aid or funding was sought to conduct this research. The research was the only individual who was responsible for the funding of this research. The research was submitted to School of Public Health under the College of Health Sciences, University of Ghana in partially fulfilment of the requirement for the award of a Master’s degree in Public Health.
CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents findings of the study in the form of tables, figures and narratives all in the relation to the objectives of the study. The chapter also includes socio-demographic data, client expectations and perceptions of quality of healthcare at Kwahu Government Hospital. Statistical Package of Social Sciences (SPSS) Version 18, STATA Version 15.0 and Microsoft Excel 2013 was used drawing charts and tables.

4.1 Respondents’ socio-demographic characteristics

The research surveyed 188 participants meaning the feedback rate of 100%. The table below shows the respondents socio-demographic data. As indicated table, 5.85% consisted of 11 respondent aged between 18-20 and only 1.6% (3) aged 61 and above took part in the study. Age group between 21-30 years which formed 45% (85) participants was the highest respondents in the study. Followed by 22.87% of respondents aged between 31-40 years. Majority of the study respondents were females of about 64.36% (121) and males consisted of 35.64% (67) of research participants. In terms of marital status of the study participants 105 (55.85%) were single and 83 (44.15%) respondents were married.

In response to education level of those who took part in the study, about 4.79% (9) had no formal education, 6.38% (12) at least had primary education, 29.26% consist of 55 participant each had JHS/Middle and SHS level of education. About 30.32% of (57) had tertiary education.
The data showed that 37.23% (70) were public servants 27.66% (52) were self-employed and unemployed consist of 35.11% (66) of the total research respondents. With regards to the health insurance status, 56% (94) and 50% (94) were insured and no uninsured respectively.

About 84.045 (158) of the respondents were there for follow up visit as well as 115.96% (30) of the rest of the participants were there for initial visit or first time visit to the Hospital.

<table>
<thead>
<tr>
<th>Table 2: Respondents’ socio-demographic characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics</td>
</tr>
<tr>
<td><strong>Age group (years)</strong></td>
</tr>
<tr>
<td>18-20</td>
</tr>
<tr>
<td>21-30</td>
</tr>
<tr>
<td>31-40</td>
</tr>
<tr>
<td>41-50</td>
</tr>
<tr>
<td>51-60</td>
</tr>
<tr>
<td>61 and above</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
</tr>
<tr>
<td>Married</td>
</tr>
<tr>
<td>Single</td>
</tr>
<tr>
<td><strong>Level of education</strong></td>
</tr>
<tr>
<td>No formal education</td>
</tr>
<tr>
<td>Primary</td>
</tr>
<tr>
<td>JHS/Middle school</td>
</tr>
<tr>
<td>SHS</td>
</tr>
<tr>
<td>Tertiary</td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
</tr>
<tr>
<td>Public servant</td>
</tr>
<tr>
<td>Self employed</td>
</tr>
<tr>
<td>Unemployed</td>
</tr>
<tr>
<td><strong>Health insurance</strong></td>
</tr>
<tr>
<td>Insured</td>
</tr>
<tr>
<td>Uninsured</td>
</tr>
<tr>
<td><strong>Type of visit</strong></td>
</tr>
<tr>
<td>Initial visit</td>
</tr>
<tr>
<td>Follow up visit</td>
</tr>
</tbody>
</table>
4.2 Insured clients expected healthcare quality

The study results revealed that 64 (68.08%) of the respondents who had valid NHIS card expected service quality to be high, 20 (21.28%) expected the healthcare quality to be average. However, 10 (10.64%) of the insured clients scored service quality to be poor or low as indicated in the chart below.

![Pie chart showing expected healthcare quality](chart.png)

**Figure 2: Insured clients expected healthcare quality**

4.3 Uninsured clients expected healthcare quality

Clients who were study respondent without valid NHIS card (uninsured), 55.32% (52) expected service quality to be high, 32.98% (31) of uninsured also expected level of healthcare quality to be average or moderate and 11.70% (11) of clients without NHIS who partake in the study also expected the service quality to be poor as well.
4.4 Service quality dimension analysis

The data collection tool used to measure the service quality consisted of 44 questions. The first 22 questions were used to measure the expectation of the respondent quality of healthcare and other 22 set off questions were also used to quantify the patients’ perception of quality of healthcare. The study used five (5) quality dimension tools which includes: tangible, assurance, responsiveness, reliability and empathy. For the purpose of interpretation of this study, mean aggregate scoring between 4 and 12 as poor quality, scoring between 12.01 and 16 as moderate or fairly quality and scoring between 16.01 and above as high quality of healthcare. Similar method was used to measure total perception of healthcare quality, scoring between 24 and 72 were seemed to be low, 72.01-96 indicates average quality of care as well as scoring between 96.01-120 shows high quality of healthcare services.
4.5 Insured and Uninsured Perceptions of quality of healthcare

In order to compare the differences in perceptions of quality of healthcare between the two groups, the insured and uninsured student t-test was employed. The table below shows the comparison between those with and without valid health insurance. In total, the study results show that the perception of quality of healthcare among those with health insurance (m=80.47, SD=14.15) and patients without health insurance (m=80.23 SD=15.12) are virtually the same. In line with the service quality, both insured and uninsured agreed that the healthcare quality is good.

Staff give prompt services to patient, insured (mean=3.54, SD=1.25) as compare to uninsured rated it as quality as (m=3.57, SD=1.25). The staff willingness to assist patients, patient without insurance (m=4.22, SD=1.31) and insured group (m= 4.22, SD= 1.20). Participants perception of assurance of service quality both insured and uninsured rated quality of care for staff being courteous with patient as (m= 3.74, SD= 1.24) and (m=3.80, SD= 1.32) respectively. Knowledge of the staff to answer patient question, insured , respondent (m= 3.58 ,SD= 1.26) and uninsured (m= 3. 63 ,SD= 1.290, The service quality in line with the empathy and its specific measurements or indicators patient without health insurance, scored service quality as (m= 3.30 SD= 1.38)and those with health insurance (m= 4.22 ,SD= 1.39) regarding the care and understanding individual specific needs. To give individual attention by the staff insured group (m=3.92, SD =1.38) as compare to uninsured (m=3.88,SD=1.36).
Table 3: T–test on perceived differences in quality of case between insures and uninsured patients

<table>
<thead>
<tr>
<th>Indicators of quality of care</th>
<th>Insures Mean (N=94)</th>
<th>Insures Std. Dev.</th>
<th>Uninsured Mean (N=94)</th>
<th>Uninsured Std. Dev.</th>
<th>T-test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tangible</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital will have modern equipment</td>
<td>3.23</td>
<td>1.18</td>
<td>3.21</td>
<td>1.24</td>
<td>3.544</td>
</tr>
<tr>
<td>Hospital will be visually appealing</td>
<td>4.11</td>
<td>1.13</td>
<td>4.09</td>
<td>1.26</td>
<td>4.234</td>
</tr>
<tr>
<td>Hospital will have clean building, facility and surrounding</td>
<td>3.15</td>
<td>1.09</td>
<td>3.12</td>
<td>0.18</td>
<td>5.612</td>
</tr>
<tr>
<td>Pamphlets will be visually appealing in the hospital</td>
<td>3.82</td>
<td>0.17</td>
<td>3.79</td>
<td>1.06</td>
<td>2.412</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide healthcare service on schedule without any delays</td>
<td>3.36</td>
<td>1.37</td>
<td>3.33</td>
<td>0.28</td>
<td>3.123</td>
</tr>
<tr>
<td>Keep accurate and up to date records of patients</td>
<td>4.25</td>
<td>1.31</td>
<td>4.18</td>
<td>1.08</td>
<td>4.413</td>
</tr>
<tr>
<td>Medical procedures performed accurately and on time</td>
<td>3.72</td>
<td>1.32</td>
<td>3.66</td>
<td>0.23</td>
<td>3.516</td>
</tr>
<tr>
<td>Medical staff will show sincere interest to solve patients problems</td>
<td>3.93</td>
<td>1.38</td>
<td>3.84</td>
<td>1.16</td>
<td>4.142</td>
</tr>
<tr>
<td>Provide service at the appointed time</td>
<td>3.94</td>
<td>1.31</td>
<td>2.88</td>
<td>1.32</td>
<td>4.712</td>
</tr>
<tr>
<td><strong>Responsive</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient inform when service will be perform</td>
<td>3.66</td>
<td>0.27</td>
<td>3.58</td>
<td>1.28</td>
<td>3.921</td>
</tr>
<tr>
<td>Give prompt services to patients</td>
<td>3.54</td>
<td>1.25</td>
<td>3.57</td>
<td>1.25</td>
<td>3.617</td>
</tr>
<tr>
<td>Never be too busy to respond request from patients</td>
<td>3.53</td>
<td>1.31</td>
<td>3.50</td>
<td>1.09</td>
<td>3.813</td>
</tr>
<tr>
<td>Staff will to help patients</td>
<td>4.23</td>
<td>0.29</td>
<td>4.20</td>
<td>0.31</td>
<td>3.923</td>
</tr>
<tr>
<td><strong>Assurance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel safe in interacting with the staff</td>
<td>3.83</td>
<td>1.21</td>
<td>3.97</td>
<td>1.30</td>
<td>3.421</td>
</tr>
<tr>
<td>Staff conduct themselves that instill confidence in patients</td>
<td>3.45</td>
<td>0.22</td>
<td>3.40</td>
<td>1.17</td>
<td>3.233</td>
</tr>
<tr>
<td>Staff very courteous with patients</td>
<td>3.74</td>
<td>1.24</td>
<td>3.80</td>
<td>0.32</td>
<td>4.121</td>
</tr>
<tr>
<td>Knowledge to answer patient questions</td>
<td>3.58</td>
<td>1.26</td>
<td>3.63</td>
<td>1.29</td>
<td>3.133</td>
</tr>
<tr>
<td><strong>Empathy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care and understanding individual specific needs</td>
<td>4.22</td>
<td>1.39</td>
<td>4.30</td>
<td>1.38</td>
<td>4.334</td>
</tr>
<tr>
<td>Consultation and operating hours convenient to all patient</td>
<td>3.89</td>
<td>0.36</td>
<td>3.85</td>
<td>0.35</td>
<td>3.517</td>
</tr>
<tr>
<td>Explain what is wrong with patients</td>
<td>3.38</td>
<td>1.31</td>
<td>3.35</td>
<td>1.33</td>
<td>2.425</td>
</tr>
<tr>
<td>Give individual attention by the staff</td>
<td>3.92</td>
<td>1.38</td>
<td>3.88</td>
<td>0.36</td>
<td>4.314</td>
</tr>
<tr>
<td>Feedback from patients value and acknowledge</td>
<td>2.99</td>
<td>1.30</td>
<td>3.01</td>
<td>1.30</td>
<td>3.103</td>
</tr>
<tr>
<td>Overall perceived quality of care</td>
<td>80.47</td>
<td>14.15</td>
<td>80.23</td>
<td>15.12</td>
<td></td>
</tr>
</tbody>
</table>
4.6 Insured clients perceived least important healthcare feature

Concerning the least important feature of healthcare, insured clients who took part in the study, 40% reported that the appearance of the health facility as least important to them, 10% claimed the willingness to help clients when needed, caring and individual attention, 18% rated it as least important feature as well as 17% revealed that the providers ability to perform service was least important feature and lastly 15% reported that the knowledge and courtesy of healthcare providers were least important feature to clients with valid health insurance.

4.7 Uninsured clients perceived least important healthcare feature

Regarding the perceived least feature to clients who were uninsured, 40% reported that appearance and physical facility as least important. About 20% also revealed that ability to perform scheduled service was least important to them, 16% also report also that knowledge and courtesy of the care providers were the third least important feature, 13% believed that willingness to help their clients when the needs arise and 11% of uninsured reported that caring and individual attention as least important feature to them.
Table 4: Insured and uninsured perceived least important healthcare feature

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Insured</th>
<th></th>
<th>Uninsured</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Caring and attention</td>
<td>17</td>
<td>18%</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td>Knowledge and courtesy</td>
<td>14</td>
<td>15%</td>
<td>12</td>
<td>13%</td>
</tr>
<tr>
<td>Willingness and help</td>
<td>9</td>
<td>10%</td>
<td>15</td>
<td>16%</td>
</tr>
<tr>
<td>Ability to perform</td>
<td>16</td>
<td>17%</td>
<td>19</td>
<td>20%</td>
</tr>
<tr>
<td>Appearance of the physical facility</td>
<td>38</td>
<td>40%</td>
<td>38</td>
<td>40%</td>
</tr>
</tbody>
</table>

4.8 Insured clients perceived most important healthcare feature

Majority of clients who had valid NHIS card, 42% of the perceived caring and individual attention received by clients as most important feature, 20% also perceived also perceived willingness of healthcare provider to help clients promptly as their most important and 16% of study participant perceived knowledge and courtesy of the service provider as most important feature.

4.9 Uninsured client perceived most important healthcare feature

Client without health insurance, 44% perceived caring and individual attention as most important healthcare feature, 20% revealed that providers willingness to help their customers promptly as second most important healthcare feature and 18% of uninsured clients believed that the knowledge and courtesy of the health staff as third most important healthcare feature.
Table 5: Most important healthcare features

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Insured</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Caring and attention</td>
<td>39</td>
<td>42%</td>
</tr>
<tr>
<td>Knowledge and courtesy</td>
<td>15</td>
<td>16%</td>
</tr>
<tr>
<td>Willingness and help</td>
<td>23</td>
<td>24%</td>
</tr>
<tr>
<td>Ability to perform</td>
<td>9</td>
<td>10%</td>
</tr>
<tr>
<td>Appearance of the physical facility</td>
<td>8</td>
<td>8%</td>
</tr>
</tbody>
</table>
CHAPTER FIVE

DISCUSSION

5.0 Introduction

This section discusses the outcome of the study in relation to the other studies conducted in Ghana and other part of the world. The study sought to assess the perceptions of healthcare quality based on client health insurance status. The following study objectives were targeted; to determine the level of expectation of clients with or without valid NHIS card on healthcare quality, to determine insured and uninsured clients perceptions on quality of service received, to determine the difference in perceptions of health service quality among patients with or without valid NHIS and identify perceive important features of health facilities among those with or without NHIS.

4.1 Socio-demographic characteristics

The study compared the demographic characteristics and insurance status of the respondents. Most of the patients who volunteered to respond to the research questionnaire who were insured constitute the youth with the ages range from 21-40 years and compare to uninsured patients who participated in study age range from 21-50 years concerning sex, and insurance status 30 of the male respondent had insurance compared to 37 of patient who had no insurance. 64 of the participants were female and insured and 57 of them were not insured. This also give evidence of health number of women hard no health insurance. This study and it sex ratio of insured and uninsured was similar to research by (Abuosi et al., 2016). It was recognized that major of married respondents (51 patients) were insured compare to 32 of the patient had insurance. This
makes it more difficult to fathom why married men and women who look more responsible and mitered had majority of them had no insurance.

Opposite result was seen as most of unmarried respondents (62) were insured compare to 43 of them did not have valid insurance. Can this result be that the respondents who were single had much resource to have insurance as compare to married participants who have huge responsibilities to cater for their families lack financial resources to pay for health insurance premiers.

The level of education also gave out unbillable results in respect to health insurance. Total number of 57 who had tertiary education who might have insight or details of essence of health insurance 10 of them had no health education inn all 55 of the patients with JHS , Middle school education, huge number of them about 40 respondent had no insurance . This presentation of the study result share similar result with the study by (Abuosi et al., 2016) .

The shocking result of all was the employment status in relation to the insurance status, 12 of the public servants who just need to pay small amount of money to become membership or renew their health insurance were uninsured. 43 of the respondent who were unemployed. Had not insurance which was quiet not surprising because they might not have the needed financial resource to afford to pay the insurance premier annually. This revelation share similar story to research by (Abuosi et al., 2016).

4.2 Insured and uninsured client expected quality of healthcare

The study outcome of the indicated that, both insured and uninsured clients had high level expectation of quality of healthcare from health service providers. In terms of client who had valid NHIS card the percentage of their expectation was higher than those without valid NHIS
card. Small percentages of total respondents were expected poor service quality in each group. This result clearly showed that more than half percentages in each group expected the expected service quality to be high. Both insured and uninsured clients expected the service providers to perform excellent work in order to meet their expectations. This result affirmed to report by Agbelie (2017) that majority of healthcare expected high level of quality of care from the service providers.

4.3 Insured and uninsured client perceived quality of healthcare

With the reference to table (4) the general perceptions of respondents were also the same among the two group (insured and uninsured clients). This result indicate that there is no much differences in perceived quality of care between insured and uninsured clients. This report is in agreement to study by (Abuosi et al., 2016) concluded that there was no significant difference in perceptions of quality of care by between insured and uninsured patients.

4.4 Insured and uninsured difference in perceptions on all the components of health service quality

The study also compared the perceived differences in healthcare quality between insured and uninsured patients. The specific measurement to assess all the five (5) dimensions of SERQUAL domain of quality of care. However, there were little difference in specific units of measuring quality as similar result appeared in the research work by Abuosi et al…(2016). The same result was reported by Perez Debra et al… (2009) also presented same result.
Under the tangible dimension of care quality, the physical appearance of the hospital would be visually appearance and staff of the hospital appearance gave different impressions about the service quality.

The indicators for measurement of service quality, feel safe in interacting with the staff, courteous with patient and conducting themselves to still confidence in patients. Different score was reported in the study finding. This is in line with Banku (2007) which also reported interpersonal relationship with the healthcare providers and the patients were beyond satisfaction.

The responsiveness of care from provider to their customers were almost the same. Study to compare the perceived quality of care amount insured and uninsured among Latinos in American in the United State saw that talking or sharing of information with the provider making level of communication was poor which was quite different from the study results.

The empathy of the dimension was also importance to the respondent. Both insured and uninsured client believe that and extending individual needs, working hours and consultation to every customers. There were not much or little different in the average score of perceived quality of care. This aspect of the study report was back by the Dagger and Sweeney (2006) which emphasis on the competences and knowledge of the care provider.

Finally the reliability of the healthcare professionals with its specifics measurement or indicators by providing service to patient as scheduled. Keep proper and updated health records of their clients.
4.5 Perceived important features of healthcare quality among insured and uninsured

The study also compared the perceived important feature of healthcare quality between clients with and without valid NHIS card to determining which of the features importance to each group. The study reported that both insured and uninsured shared the same view with regards to important healthcare feature. They all perceived that, caring and individual attention provided by service providers were the most important feature of healthcare quality and the willingness of the healthcare providers to help their clients promptly as second most important feature.

Contrary to this result, study by Agbelie (2017) reported that, the willingness of service providers to help and give prompt care to their clients were most important healthcare quality feature to the caregivers.

The study outcome also indicated that, when it comes to the least important feature of healthcare quality, both insured and uninsured respondents perceived that the appearance of the physical facility was least important to them. Agbelie (2017) reported that, knowledge and courtesy of service providers were least important feature which is completely different from this study.
6.0 Conclusion of the study

This study sought to determine health insurance status and client’s perception of quality of healthcare quality. The study was accomplished by assessing client perception of health quality of healthcare based on health insurance status employing quantitative study method to elicit data, by giving questionnaires to study respondents to assess healthcare quality. This study will assist hospital management team to collaborate with other healthcare staff of health institutions in Ghana to formulate, plan, implement and evaluate health policies and quality in order to build strong teamwork to give customers high quality of care.

More than half of the study respondent believed that the service quality of healthcare was average or moderate. Therefore there is the significant needs to work hard healthcare providers to sit up to build teamwork, formulate good health administrative policies and education to achieve high healthcare quality. Both insured and uninsured clients expected high level of quality of healthcare whilst majority of clients with or without healthcare insurance perceived healthcare to be average. The caring and attention were the most important feature of healthcare and appearance of physical facility was least important feature of healthcare quality. The study used description cross-sectional method and the outcome cannot be general because the study was limited to only one health institution. However the results can serve as guideline to general public to take into consideration when giving healthcare to patients at Kwahu Government Hospital, Atebie.
6.1 Recommendation

Based on the findings of the study, the following recommendations are made:

1. Regarding clients’ expectations healthcare, it was revealed that majority of the respondents expected high level of healthcare quality. Therefore, there is the need for healthcare providers to collaborate with their customers and listen to their concerns in order to know their expectations and perceptions of quality of care from the clients. It is also important to educate client what they should expect from their providers.

2. The study also revealed that caring and individual attention giving to clients were most important healthcare feature. It is therefore much prudent for the service providers to pay important attention to individual needs and provide needed care based on their individual needs.

3. Concerning the overall perception of healthcare quality, both insured and insured perceived service quality to be average or moderate. The following recommendations have been made to improve the healthcare quality in order to meet client perceptions of care. Periodic reviewing and monitoring of healthcare quality to improve client expectations and perceptions of care.
REFERENCE


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APPENDICES

Appendix A: Respondent’s information sheet

School of Public Health

College of Health Sciences

University of Ghana, Legon

Research title: Health insurance status and client’s perceptions of quality of quality of care at Kwaku Government Hospital, Atebie.

Introduction: I am Tabiri Opoku, a post graduate student of School of Public Health, University of Ghana, Legon. This study is undertaking on health insurance status and perceptions of healthcare quality. I humbly request your service to partake in the research. The principal researcher would be assisted by for (4) research assistants to collect data from the study participants. This study seeks to elicit respondents perceptions of healthcare quality based on their health insurance status. Clients are required to answer research questions base on their expectations and perceptions of quality of healthcare.

Procedures: The research will involve answering of study questionnaire on perceptions of healthcare quality based on their health insurance status. I will be very grateful if you can do me a favour to partake in this study. The data obtained from the research participants will be solely use for academic purposes and it is part of requirements for the award of Master’s degree in Public Health.
Confidentiality and Anonymity: The data obtained from the study respondents would be safely kept without the knowledge of any other person apart from the principal investigator and his supervisor and identity of the study participants would not be known to anyone to ensure and respect respondent’s privacy as agreed prior to acceptance to partake in the research.

Risk and Benefits: The study would not bring any direct benefits to participants but he results of the study would rather assist or serve as guiding principles to make good healthcare policies by the hospital management team (policy makers) to improve the health system in Ghana as a whole. The respondent’s will be assured that taking part in the study would not bring any risk or cost to him or her but he or she precious time may be needed to answer research questions.

Right to refuse participation: Taking part in the research this study is purely voluntary and respondent has the right to withdraw from partaking in the study without present or future negative consequences on you. The study respondent has the right to partially or fully answer the research questions. The principal investigator would be very grateful if all the study questions would be answered by answered by the participants. The respondents can also seek further clarification and explanations of the study questions.
Respondent consent form

I (respondent) have read or someone (research assistants or principal investigator) has read and explained the study questions and aims of the study to me. I voluntary accepted to partake in the study.

................................................. .................................................

Date                                          Signature of the respondent
Principal investigator statement

I, the principal investigator of the study undersigned have explained the consent form to partake in the study in a language the respondent comprehend, the aims, of the research, procedures to be followed as well as the risks and benefits of the research. The respondent has completely agreed to take part in the study.

.......................................................................................................................... ...........................................

Signature of the principal investigation Date

For further inquiry, kindly contact:

Principal investigation: Tabiri Opoku

Phone numbers: 0245868583/0207602533
APPENDIX B: Questionnaire

School of Public Health

College of Health Sciences

University of Ghana, Legon

I am post graduate student of the School of Public Health, University of Ghana and conducting research on the topic: **Health Insurance Status and Client’s Perceptions of Quality of Care Received at Kwahu Government Hospital**. Participation in this study is voluntary and withdrawal would not affect your health care. The information that will be given shall be treated with confidentiality and for academic purposes. The study will try to find out your perception of the quality of care given to patients’ base on their health insurance status. You are required to share your experiences on quality of care by responding to the following questions.

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<tr>
<th>Participant ID:</th>
<th>Question number</th>
<th>Question</th>
<th>Response</th>
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<tr>
<td></td>
<td>Section A</td>
<td>Socio-demographic characteristics</td>
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<td>1</td>
<td>What is your sex?</td>
<td>1. Male</td>
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<td>2. Female</td>
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<td>2</td>
<td>What is your age?</td>
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<td>3</td>
<td>What is your marital status?</td>
<td>1. Married</td>
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<td></td>
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<td>2. Single</td>
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<td>4</td>
<td>What is your employment status?</td>
<td>1. Public servant</td>
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<td></td>
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<td>2. Self employed</td>
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<td></td>
<td></td>
<td>3. Unemployed</td>
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### SECTION B: SERVICE QUALITY DIMENSION AND MEASUREMENT

This section deals with your opinions of the hospital, please tell about the kind of hospital that would deliver excellent quality of service. Please show the extent to which you think these hospital should possess the following features. What I am interested in here is a number that best shows your expectations about the hospital offering service to you. If you think a feature is absolutely important for excellent hospital. If your feelings are less strong, write one of the options in middle of space provided.

<table>
<thead>
<tr>
<th>8</th>
<th>Excellent hospital will have modern equipment</th>
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<td>9</td>
<td>The physical facility at excellent hospital will be visually appealing</td>
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<tr>
<td>10</td>
<td>Excellent hospitals will have very clean building, facility and surroundings</td>
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<td>11</td>
<td>Material associated with the service such as pamphlets will be</td>
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<td>visually appealing in an excellent hospital</td>
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<td><strong>RELIABILITY</strong></td>
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<td>12</td>
<td>Excellent hospitals will provide health care services on schedule without any delays</td>
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<tr>
<td>13</td>
<td>Excellent hospitals will keep accurate and up to date records of patients</td>
</tr>
<tr>
<td>14</td>
<td>Excellent hospitals medical procedures will be performed accurately and on time.</td>
</tr>
<tr>
<td>15</td>
<td>In the excellent hospitals, medical staff will show sincere interest to solve patients’ problems.</td>
</tr>
<tr>
<td>16</td>
<td>Excellent hospital will provide their service at appointed time</td>
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<td><strong>RESPONSIVE</strong></td>
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<td>17</td>
<td>In excellent hospitals, patients will be inform of when service will be performed by personnel.</td>
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<td>18</td>
<td>Personnel in excellent hospitals will give prompt services to patients</td>
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<tr>
<td>19</td>
<td>In excellent hospitals, staffs will never be too busy to respond request from patients.</td>
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<td>20</td>
<td>In excellent hospitals, staffs will always be willing to help patients</td>
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<td><strong>ASSURANCE</strong></td>
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<td>21</td>
<td>In excellent hospitals, patients will feel safe in interacting with the staff</td>
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<td>In excellent hospitals, staff will conduct themselves that instill</td>
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<td>23</td>
<td>In excellent hospitals, staffs will be courteous with patients</td>
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<td>24</td>
<td>In excellent hospitals, staffs will possess a wide spectrum of knowledge to answer patients’ questions</td>
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<td>EMPATHY</td>
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<tr>
<td>25</td>
<td>In excellent hospitals, staffs will care and understand individual specific needs</td>
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<td>26</td>
<td>Excellent hospitals will have consultation and operating hours convenient to all patients</td>
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<td>27</td>
<td>In excellent hospitals, staffs will know what is wrong with patients</td>
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<td>28</td>
<td>In excellent hospitals, patients will be given individual attention by the staffs</td>
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<tr>
<td>29</td>
<td>In excellent hospitals, feedback from patients will be valued and acknowledged in order to improve services.</td>
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</table>

The following statements relate to your feelings about the particular hospital where you have received health care. Please show the extent to which you believe the hospital has the feature described in the statement. Here, we are interested in a number that shows your perceptions about the hospital which treated you. Once again write 1 means you strongly disagree that the hospital you have attended has this feature and write 5 means that you strongly agree.

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<tr>
<td>30</td>
<td>The hospitals will have modern equipment</td>
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<td>31</td>
<td>The physical facility at hospital will be visually appealing</td>
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<td>32</td>
<td>The hospitals have very clean building, facility and surroundings</td>
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<td>33</td>
<td>Material associated with the service such as pamphlets will be visually appealing</td>
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RELIABILITY
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<td>34</td>
<td>The hospitals will provide health care services on schedule without any delays</td>
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<td>The hospitals keep accurate and up to date records of patients</td>
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<td>The hospital’s medical procedures will be performed accurately and on time</td>
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<td>The hospital’s medical staff will show sincere interest to solve patients’ problems</td>
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<td>38</td>
<td>The hospital provide their service at appointed time</td>
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<td>39</td>
<td>Patients are informed of when service will be performed by personnel.</td>
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<td>40</td>
<td>Personnel in the hospitals give prompt services to you</td>
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<td>41</td>
<td>Staffs are never too busy to respond request from patients.</td>
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<td>42</td>
<td>The hospital’s staffs are always willing to help you</td>
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**ASSURANCE**

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<td>43</td>
<td>Patients feel safe in interacting with the staff</td>
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<td>44</td>
<td>Staff conduct themselves that instill confidence in patients</td>
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<tr>
<td>45</td>
<td>The hospital’s staffs are very courteous with patients</td>
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<td>46</td>
<td>Hospital’s staffs possess a wide spectrum of knowledge to answer patients question</td>
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**EMPATHY**

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<td>47</td>
<td>The hospital staffs care and understand individual specific needs</td>
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<tr>
<td>48</td>
<td>The hospital has consultation and operating hours convenient to all patients</td>
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<tr>
<td>49</td>
<td>The staffs have the best interest of patients heart</td>
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<td>50</td>
<td>Patients was given special individual attention by the staffs</td>
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Feedback from patients are valued and acknowledged in order to improve services.

SECTION C

List below are the features pertaining to hospital and the service they offer. I would like to know how important of each of these features is to you when you evaluate the service offered by the hospital. Please allocate a total of 100 points among the five features according to how important each of feature is to you – the more important a feature is to you, the more the points you should allocate to it. Please ensure that the point you allocate to the five features add up to 100.

1. The appearance of the hospital physical facilities, equipment, personnel and communication materials.  …………… points
2. The hospital ability to perform the promised service dependently and accurately.  …………… points
3. The hospital willingness to help patients and provide prompt service.  …………… points
4. The knowledge and courtesy of the hospital personnel and their ability to convey trust and confidence.  …………… points
5. The caring, individualized attention the hospital provide to its patients.  …………… points

Total points allocated ……………………………………………………………………………………100 points

Which one feature of the above is most important to you?  …………………
Which feature is second most important to you?  …………………
Which feature is least important to you?  …………………

Thank you.
APPENDIX C: Ethical Clearance