## KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (INSTITUTE OF DISTANCE LEARNING)

# QUALITY ASSURANCE IN THE GHANA HEALTH SERVICE-A CASE STUDY OF AKUSE GOVERNMENT HOSPITAL

BY

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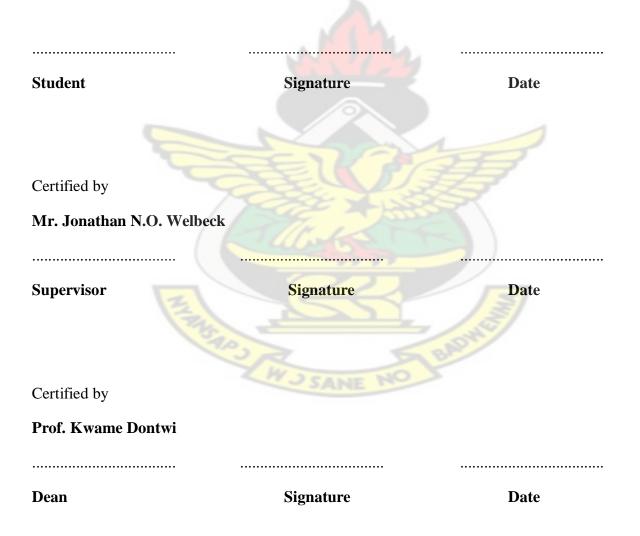
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF COMMONWEALTH EXECUTIVE MASTERS IN BUSINESS ADMINISTRATION



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## **DECLARATION**

I hereby declare that this submission is my own work towards the award of the Commonwealth Executive Masters in Business Administration (CEMBA) and that to the best of my knowledge, it contains no material previously published by another person or any material which has been accepted for the forward of any other degree of the University, except where due acknowledgement has been made in the text.



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## DEDICATION

To God be the glory, great things he hath done and to my one and only mum, Madam Doris Fosuhene, Where would I have been had I not met you. I wish you long life filled with happiness.



#### ABSTRACT

The study evaluated the extent to which Akuse Government Hospital is adhering to quality assurance standards spelt out by the Ghana Health Service and its contribution to the delivery of quality healthcare. Patients who attended the health facility between January to June, 2011 were sampled for the study. The study is in line with ongoing efforts to improve the quality of healthcare through the enforcement of quality assurance standards by the Ghana health service. To achieve the research objectives, the study employed the survey method where structured questionnaires were administered to eighty outpatients and another twenty to inpatients. The results were analyzed using Microsoft excel for easy interpretation. The findings from the study indicated that the hospital has over the years improved on many of the quality indicators and hence it reflected positively on the professional indicators used in the study. It is recommended that infection prevention measures should be strengthened and patient education on health related matters should be intensified.



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## CHAPTER ONE INTRODUCTION

#### **1.0 Introduction**

At the time of independence, in 1957, Ghana was economically prosperous having large gold reserves and high prices from cocoa for which Ghana was a leading producer. An ambitious development programme, unfair world trade practices and a series of disruptive coup d'état led to a decline in the economy in the 1970's and 1980's. By 1983, inflation had peaked 123 percent. (Tweneboah and Opoku, 1998).

The economic decline had a profound effect on health. Health infrastructure deteriorated severely with very little expansion to meet the needs of the increasing population. Health care equipments and supplies such as drugs became scarce and many health care professional left the countries to work elsewhere in search for greener pastures. As a result of these factors, health care quality fell drastically. This was accompanied by intense public and media outcry over shortage of drugs and basic medical supplies and uncaring attitude of health professionals (Tweneboah and Opoku, 1998)

Government responded by issuing user fees in 1983 to supplement central funding. While this led to increased revenue to health facilities and in some cases improved basic supplies, it also led to a sharp and sustained decline in the utilization of outpatient services in all facilities. Quality of care received increasing attention as clients demanded value for money they had paid for services. Subsequent local and global initiatives gave impetus for tackling the poor quality of care. This includes the Structural Adjustment Programme (SAP) and its related programme of actions to mitigate the social cost of adjustment (PAMSCAD). Strengthening District Health

Systems (SDHS), initiative of the late 1980's through 1990's, the health sector reforms and the experimentation with mutual health insurance schemes which later evolved into country wide national Health Insurance Schemes(NHIS) aimed at addressing the negative effects of user-fees(Cash& Carry).

In the midst of all these efforts, patients still complained about the poor quality of the healthcare services they received at health facilities. Poor quality causes loss of lives, loss of revenue, low morale among health workers and poor image of health care providers. (HealthCare Quality Assurance Manual<sup>1</sup>, 2004). In Ghana, improving the quality of healthcare is a key objective of the ministry of health and the Ghana Health Service. One of the strategies for achieving this is through the implementation of quality assurance programmes in all health facilities (The quality assurance project, 2000). It is envisaged that quality assurance will become an integral part of routine health service delivery in Ghana.

Quality Assurance (QA) in Ghana's health sector begun in the Eastern and Upper West Regions through the support of Danish International Development Agency (DANIDA) and the Liverpool school for Tropical Medicine. By 1998, most health institutions of the regions have quality assurance programmes although they are all at different stages of implementation ( The Quality Assurance Project, 2000). However, the implementation of quality assurance at the subdistrict levels is rather low. Quality assurance(QA) surveys are targeted at health center and clinic staff at the subdistricts in both the private and public sectors. Its main objectives are to raise awareness about the importance of quality assurance in everyday work situations, training of health workers in the private and governmental health institutions, and assists managers

<sup>&</sup>lt;sup>1</sup> Healthcare Quality Assurance Manual was prepared by Dr Aaron K. Offei, Dr. Cynthia Bannerman and Mr. Kumi Kyeremeh, for the Ghana health services with support from DANIDA.

supervising the implementation of quality assurance programmes (Ghana Denmark Health support programme, Ministry of Health-Upper West Region, 1996).

Akuse Government hospital is one of the oldest hospitals in Ghana. Built by the Germans in 1911, it is situated on a piece of land given to them by the Ocansey family. The hospital serves a number of communities in the Lower Manya Krobo District and the surrounding districts such as Yilo Krobo, Asuogyaman, North Tongu, Dangbe West districts. It is a 58 bed capacity hospital operating with staff strength of 74 comprising of 36 nurses and other clinical and non clinical staff. It sees an average of two thousand four hundred and fifty six (2,456) insured and non-insured clients in a month.

The hospital as part of its commitment to quality service conducts a number of surveys which includes client's satisfaction, staff satisfaction, professional indicators and in general the perceived image of Akuse Government Hospital. This research work is aimed at assessing the quality assurance framework in Akuse Gov hospital and its contribution towards the delivery of health care services. The concept of Quality Assurance is based on ensuring a good service that is of a set standard of quality. It is an undeniable fact that an institution cannot thrive properly when it does not in any way assess the effects of its operations on clients and develop new strategies on how to reach its set standards or goals.

#### **1.1 Problem Statement**

Health care is undoubtedly a very essential service that the government through the ministry of health and under the auspices of the Ghana Health Service (GHS) delivers to the people resident in Ghana. Quality health care is therefore regarded as a key to national development. In this light, a sizeable amount of the national budget is invested in the ministry of health to ensure it performs its mandate. (Quality assurance project, Ghana Health Service, 2009). In view of this the GHS demands nothing but the highest quality of health services to all and sundry. GHS has in turn invested heavily on human resource capacity, infrastructure, as well as promulgated a host of policies to all government and private hospitals in a bid to achieve that goal. At least all government hospitals have one form of quality assurance system or the other and Akuse Government Hospital is no exception.

The hospital management and staff over the years have put in place a lot of measures and effort to improve service delivery. Some of the problems identified in the 2009 studies include patients not given instructions about their drugs, the seeming lack of technical competence among staff, inequalities in treating different categories of patients, low efficiency in the service delivery system, ineffective staff, hospital environment becoming a health hazard for patients and staff, poor state of amenities amongst others. This led the formulation of an action plan to address these problems. It is therefore necessary to undertake this study to find out whether the various interventions have yielded the desired results in terms of the above mentioned parameters and ultimately, prescribe remedies to them if there are still unacceptable gaps in quality.

## **1.2 Objectives of the study:**

The general objective of the study is to evaluate the quality assurance system of Akuse government hospital and its contribution on the quality of healthcare. The specific objectives of the study include:

- To assess the quality assurance processes employed at Akuse Government Hospital (AGH)
- To examine the level of satisfaction of patients with regards to the kind of healthcare services offered them by the Akuse Government Hospital.
- ◆ To evaluate AGH adherence to health quality standards by the Ghana health Service
- To examine the contribution of Quality assurance system to improvement in quality of healthcare.

## **1.3 Research Questions**

The study intends to answer the following research questions:

- ♦ How effective are quality assurance process in Akuse government Hospital?
- Are patients satisfied with the kind of services rendered to them by Akuse Government Hospital?
- ◆ To what extent is AGH adhering to health quality standards by the Ghana health Service?
- Does the implementation of quality assurance programmers lead to improvement in quality of healthcare in AGH?

#### **1.4 Relevance of the study**

The hospital is a growing institution which is committed to provide quality care or service to its clients. Periodic surveys of this nature are very important to receive feedbacks from the clients to assess the hospital performance. The information gathered from the survey would be useful in improving upon the quality of service. The beneficiaries of this research include management and staff of Akuse Government Hospital, district and regional health administration of the Ghana Health Service (Eastern Region) and the ministry of health. The finding of this study would also benefit members of the communities within the hospital catchment areas since it would lead to improving the quality of care they receive.

#### 1.5 Research methodology

Using a survey data obtained from 100 randomly selected patients, the study evaluates the extent to which the health services provided at Akuse Government Hospital meets the GHS approved standards and more so meets or exceeds the patient's expectations. The study starts with a brief description of the demographic characteristics of the sample and then continues with an evaluation of the health services provided at Akuse Government Hospital. The study uses trend analysis, bar charts and pie charts and analyses whether there are any improvements or deterioration.

## **1.6 Organization of the research**

The study is in five chapters. This current chapter discussed the background, statement of the problem, objectives, research questions, justification and research methodology of the study. Chapter two undertakes a review of literature on decentralization and related concepts. Chapter three deliberated on the methodology used for the study. Chapter four presents and discusses the empirical results of the study. In chapter five, the summary, conclusions and recommendations of the study are provided. Besides, limitations of the study and makes recommendations for future research.



## **CHAPTER TWO**

## LITERATURE REVIEW

## **2.1 Introduction:**

This chapter seeks to explicitly define the thoughts of various writers on the subject of quality and try to relate it to the imperatives of the service industry, more specifically, the health service in Ghana. The chapter also seeks to underscore the importance of delivering good quality care to patients and to point out to readers of the fact that all that matters to a committed health professional is to see a patient get well and more so to recommend the facility to others.

#### **2.2 The concept of quality**

The concept of quality has to do with how good or bad a thing is. It can also be said to be the degree to which a product or service meets the expectation of an individual or group. Some of the words commonly used to describe quality are

- Beautiful or attractive
- Durable
- Meeting standards
- Healthy
- Value for money (Parasuraman, 1990).

Although different words are used to explain, we could define it as the extent to which a product or service satisfies a person or a group i.e. how much satisfaction the person or group gets from the service.

Quality is the essential issue in Health Care. Rising expectations of the people, advances in medical and diagnostic technology, competition in the health care industry and increasing costs of poor quality have made quality of care an important issue today. There is a growing realization that quality improvement is essential for enhancing the efficiency and effectiveness of health services in both the private and public sectors.

Quality, a relatively new concept in health care, is a dynamic and complex phenomenon. There is an extensive need for capacity building in planning, implementation and managing quality assurance in health care. Also there is a great deal to be understood about the dimensions of the quality and the standards and indicators, assessment and measurement and management of quality improvement process (Arshavin, 1992)

Quality assurance is an activity of providing evidence needed to establish confidence among all concerned, that quality-related activities are being performed effectively. It may therefore be seen as planned or systematic actions necessary to provide enough confidence that a product or service will satisfy the given requirements for quality (Pittman, 2000).

Ackon (2009) also defined Quality Assurance as a methodology for identifying, analyzing and solving health care delivery problems: it provides the measurement of actual performance and its comparison with either expected or normative performance.

The Ghana Health Service (2005) also defined quality assurance in health care as a planned, systematic approach for continuously addressing, monitoring and improving the quality of health care within available resources to meet expectations of both providers and users.

Quality assurance therefore covers all activities from design, development, production, installation, servicing to documentation (Ackon 2009). It is also a part and consistent pair of quality management proving fact-based external confidence to customers and other stakeholders that a service meets needs, expectations and other requirements. Again it assures the existence and effectiveness of procedures that attempt to make sure-in advance-that the expected levels of quality will be reached.

## 2.3 What is Quality of Care?

Quality of care means healthcare activities that personnel in the medical, nursing, laboratory fields etc perform daily to benefit the patients without causing harm to them. (Donabedian, 1996). Quality of care demands that attention be paid to the needs of patients and clients. Methods that have been tested to the safe, affordable and can reduce deaths, illness and according to the set standards as laid down by clinical guidelines and protocols. With quality of care, the right things would have to be done at the right time. Patients would have to be seen promptly, the right diagnosis has to be made, and consequently, the right treatment given. With quality of care, it is important to keep on improving the delivery of health service until excellence is achieved (The Ghana Health Service 2005)

## 2.4 Components of Quality Health Services

Quality health service has several parts. It is important to appreciate these in order to improve the quality

of care. The parts are listed in the table below

Access	Equity
Technical competence	Continuity
Efficiency	Effectiveness
Amenities	Safety

(Source: Bannerman, 2000).

In fact Garvin (1998) substantiates this concept by propounding those quality concepts or philosophies are comprised of five stages:

Transcendent: Quality cannot be defined, and can be recognized only when the product is used or the service is experienced.

- Product based: Quality can be judged by the presence or absence of particular characteristics of the product itself. If they are present, quality can be said to be present
- Manufacturing Based: Quality exists if a product meets original specifications. Failure to meet the standards completely represents a lack of quality.
- User Based: Customer's want, expectations, needs and requirements have to be met. Until the customer is completely satisfied, quality does not exist.
- Values Based: Quality/cost trade-off (it extends beyond this. It includes the philosophy or a system approach to Quality Management).

## 2.4.1 Access to Service

This requires that, everyone should have access to quality health care. Access refers to the ability of the individual to obtain health services. Some of the factors that can affect access are:

- Distance; e.g. where the health facility is sited far away or it is difficult to get transport to the facility, access to quality health care becomes a problem
- Financial: e.g. where people cannot pay for the services provided
- Culture, beliefs and values. The services provided may not be in line with the culture, beliefs and values of some people.

#### **2.4.2** *Technical Competence*

Technical competence as an indicator of quality assurance implies that there should be adequate knowledge and skills to carry out the functions in order to provide quality servives. (The Quality Assurance Project ,2000) E.g. one must have attended medical school to be a doctor. Even when one is out of school, it is still important to update ones knowledge by reading health related books and attending in-service training workshops etc.Health professionals should also know their limits, that is, know what they can do and what they cannot do, they are expected to refer them to other centres or personnel who are more competent to handle them. Their practice should also be guided by laid down standards and guidelines e.g. Standard Treatment Guideline. (The Quality Assurance Project 2000)

## 2.4.3 Equity

Quality services should be provided to all people who need them, be they poor, children, adults, old people, pregnant women, disabled etc. Quality services should be available in all parts of the country, in villages, towns and cities.

## 2.4.4 Effectiveness

This puts emphasis on the type of care that produces positive change in the patient's health or quality of life. Therefore treatments that are known to be effective are the only ones tolerated, for example, giving a child with diarrhoea Oral Rehydration Salt (ORS)

## 2.4.4 Efficiency

Efficiency is the provision of high quality care at the lowest possible cost. (The Quality Assurance Project ,2000). Health care professionals are expected to make the best use of the resources and avoid waste by among others, prescribing only drugs necessary for patients, stocking drugs such that expiries are brought to the barest minimum and not engaging in profiligate expenditures in general as an institution

#### 2.4.5 Continuity

Continuity means that the client gets the full range of health services he/she needs, and that when the case is beyond the health care professional the patient is referred to the right level for further care.Continuity may be achieved by the patient seeing the same primary health care worker or by keeping accurate health records so that another staff can have adequate information to follow up the patient.( Ghana Denmark Health Support Programme Manual, 2000)

## 2.4.6 Safety

Safety means that when providing health services, injuries, infections, harmful side effects and other dangers to clients and other staff are reduced to the barest minimum. It is important not to put the patient's life at risk. For example unsafe blood should not be given to patients and thereby infect them with HIV/AIDS

#### 2.4.7 Interpersonal Relations

This refers to the relationship between the staff and their clients as well as the community. This requires that, the staff should amongst others show respect to their clients, feel for the patients, not to be rude or shout at the patients, not disclose information we get from patients to other people. (The Quality Assurance Project (2000). This would bring about good relations and trust between the clients/communities and the hospital. Clients consider good interpersonal relationship as an important component of quality of care.

## 2.4.8 Amenities

These are the features that can be provided by the health faciliities to make life comfortable and pleasant for clients. They contribute to clients satisfaction and make clients willing to use the services provided. For example, comfortable seats, television sets, music, educational materials, educative materials, educative video films, etc at the Out Patient Departments(OPD) and wards (The Quality Assurance Project (2000).

## 2.5 Perspectives of Quality

The health staff, the health manager, clients and communities are all stakeholders in service delivery. Each of these groups may expect different things from health services

## 2.5.1 The Patient/Client

Research done in varoious parts of the country shows that our patients/clients want services that:

- Are delivered on time by friendly and respectful staff;
- Are safe, produce positive results and that they can afford;
- Provide them with adequate information about their condition and treatment;
- Provide them with all the drugs that they need
- Give privacy
- Are within their reach(distance) and given in a language they can understand

Source:(Offei et'al,2007)

## 2.5.2The Health Staff Provider

The health provider can provide quality care if he/she has adequate knowledge and skills, enough resources-(staff, drugs, supplies, equipment and transport etc), safe and clean workplace, opportunity for continous self improvement, and is well remunirated (Offei, et'al2007).

## 2.5.3 The Health Care Manager

The health care manager sees quality care as:

- Managing efficiently the resources of the health facility;
- Health staff achieving set targets.

- Health staff being regularly suported and supervised.
- Having adequate and competent staff to provide care
- Staff being disciplined
- Providing enough resources for work

Source:(Offei, et'al2007)

## 2.6 Other ways of understanding Quality

Quality of care can also be seen from the inputs, processes and outcome of service delivery. It is important to address these together to improve on quality.

## 2.6.1 Inputs

These refer to the material needed to provide care. Examples include staff, drugs, buildings and equipments. In other words, an input describes the resources used for the provision of health care and includes physical facilities, equipment informational technology, education and qualification of staff and organizational requirements.

## 2.6.2 Process

This involves the clinical and non clinical procedures that clients are exposed to, including how resources and scientific evidence are translated into the care of clients. It refers to what is done and the way things are done. An example is the activities for outpatient care. The patient has to make a card, goes to the screening table for his/her temperature and blood pressure to be taken. She/he then goes to the consulting room after which he/she goes to the dispensary for drugs

#### 2.6.3 Output/Outcome

These refer to the effect of the health care intervention e.g. reduction in pain, disability, or improvement in quality of life (Ackon, 2009). In simple terms, it is the result of what we get out of health service delivery. For example, is the client satisfied with the service he/she gets after visiting our facility? Has there been a decrease in the outpatient attendance?

## 2.7 The concept of quality assurance and quality assurance system

Quality Assurance(QA) started long ago in Japanese industry (Juran, 1992). It was realized that through inspection, more faulty products were detected but the quality of the products did not change. It became necessary therefore to look at the ways products were made so that any changes can be made along the line before the finished product came out. The quality assurance was adopted from industry into the health care setting in developed countries. It has really helped in improving quality of care in these countries. Now, Ghana has also adopted quality assurance to improve health service delivery. Quality Assurance is a set of activities that are planned for, carried out systematically or in an orderly manner and continously to improve quality of care (Parasuraman, 1985). It involves the setting of standards; monitoring to see if there is a gap between what is being done now and what is expected ; and addressing the gap on a regular basis (quality improvement).

Quality Assurance encourages health workers to examine the services they provide, assess their own work and come out with what they can do with the limited resources to improve the quality of care. For supervisors and managers, QA calls for change from the status of an inspector to that of a facilitator, and expects the health workers to identify and solve problems. Quality Assurance also requires that health workers understand the needs of the patients and their communities in order to provide for them. Quality Assurance requires active support and commitment from leaders at the national, regional, district, sub-district levels and in the health facilities.Quality assurance system is a formal management system used to strengthen organizations. It is used to raise standards of work to make sure that "everything" is done consistently. A Quality Assurance System (QAS) system sets out expectations that a quality organization should meet. Frederick Winslow Taylor suggest the following steps organizations implementing quality systems should follow

- Agree on standards: centered on the performance of staff, trustees and users expect from the organization/company.
- Carry out a self-assessment. Comparing how well the organization is performing to the expectations.
- Draw up an Action Plan. This includes what needs to be done, who does it, how it will be done, and when.
- Implementation. Do the work
- Review or Revision. Check what changes have been made and whether they have made the difference expected to be achieved.

To assess the impact of quality assurance initiatives, it is important to utilize methods that insure reliable and valid information. This information may be extremely useful for future evaluation of quality assurance initiatives. Quality assurance methods involve the implementation of changes to improve the delivery of health care services and consequently of health status. It also recognizes that when differences between actual and expected performance occur, they should trigger a careful process of analysis to identify the root cause of these differences. The quality assurance process presumes that service providers have a will and an interest in improving the quality of care.

Quality assurance as seen from above will lead to quality of care if implemented well. Quality of health care provides some benefits to the implementing organization and the clients that benefit from the QA process.

A carefully planned quality assurance process and its outcomes provides the clients value for money, less frustration, good health outcomes and a very high level of satisfaction. It also helps the service provider to better understand staff by clients, provide essential inputs, gives the institution a good image and helps it to meet all accreditation criteria (Donabedian,1996).

#### 2.7.1 Principles of Quality Assurance

According to the Quality Assurance Programme, MOH Uganda 2000, there are five basic principles of quality assurance. These principles, as stated below, clearly show what QA is intended for.

- 1. Quality Assurance is oriented towards meeting the needs and expectations of our clients
- 2. Quality Assurance focuses on systems and processes
- 3. Quality Assurance uses data to analyze service delivery
- 4. Quality Assurance encourages the use of teams in problemsolving and quality improvement
- 5. Quality Assurance uses effective communication to improve service delivery

#### 2.7.2 Meeting the Needs of Our Clients - Principle 1

The patients who receive health services for are very important to the hospital. Without them, no health worker would be in employment. Therefore hospital mangement must do their best to satisfy them. In the past, health workers worked as if the clients did not matter, so they were not involved in healthcare neither were their needs in service delivery addressed. With QA, the situation is now changing. All over the world, patients concerns regarding their rights to participate in health care delivery is becoming important. There are two types of clients, Garvin, (1998), the internal clients and the external clients. The external clients include people who directly use the services and those who have special interest in the services rendered. They are made up of patients, relatives and friends and the community as well as other organizations: Non-Governmental Organizations(NGO'S), District Assemblies, Ministries Development partners(Donors) etc. The internal clients are the workers in the health facility. Their needs must also be catered for so they can provide quality care. It is possible to assess the clients needs either through surveys (interviews) or discussion with individuals and groups within the community who use the services. The clients are in the best position to determine what constitutes quality to them (Juran 1992). Such feedbacks are given through client surveys, community meetings, focus group discusssions etc

#### 2.7.3 Focusing On Systems - Principle 2

An organization's effectiveness and efficiency in achieving its quality objectives are contributed by identifying, understanding and managing all interrelated processes as a system.

Systems are the various aspects or components of service delivery that have to operate

together as a unit in a facility to deliver quality health care. (The Ghana health service 2005).

The three components of service delivery namely inputs, processes and outcome must be working hand in hand to deliver the right service.

#### 2.7.4 Use of Data to Improve Quality - Principle 3

Most of the time, a lot of data is collected from the hospital and simply sent to the District Director of Health Services without making use of such data. Some of the data collected include the number of people who attend the OPD, their age and sex. Information is also collected on the number of cases of malaria, diarrhoea, mothers dying from pregnancy, delivery and after delivery. These data are very useful in that they tell where there are problems in service delivery. The information can in- turn be used for planning for the services and also for monitoring.Data can also be used in identifying resources (people, drugs, and supplies as well as the amount of money) required for health services (Bannerman, 2002). As the data can be used to improve services locally, it can also be shared with community members. There are different sources from which data can be obtained, they include the health management information system, surveillance systems and survey. (Regional center for Quality of Health Care, 2001)

a) Health Management Information System (HMIS): - This is the system set up to collect routine information from health facilities. These include information from daily outpatient registers, child welfare clinics, admission and discharge registers etc (Regional center for Quality of Health Care, 2001)

b) Surveillance system:-The public Health division also collects data on communicable and noncommunicable disease throughout the country. Some of the data collected are on Malaria, Diarrhoea, Acute Respiratory Infection, Immunization, Buruli ulcer, tuberculosis, Guinea worm, Cerebrospinal meningitis.

c) Surveys:-These are done periodically to obtain information that are not available in the routine data that are collected. The Ghana Demography Health Survey collects data every five years on fertility, mortality and morbidity. (Regional center for Quality of Health Care, 2001:)

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## 2.7.4 Improving Quality Through Team Work - Principle-4

A team is a group of people who work together to achieve a common goal (Garvin, 1998). In health service delivery, there are different kinds of health workers working together. A typical example of teamwork could be seen in the outpatient service delivery. There are labourers to clean the unit, records officers to register the patient, nurses to take temperature and weight, the medical assistant or doctors to examine and prescribe the drugs, laboratory technicians to do the investigations and pharmacists to dispense the drugs. All these people are playing important roles and if they work well in the team, the outcome is always excellent.

Quality assurance uses teams in problem solving and quality improvement. A team can do a thorough analysis of problems, determine the best solutions(s) and develop plans and implement them. In starting and sustaining quality assurance programme, there is also the need for strong leadership support and commitment (Garvin, 1998). Team work always has a lot of advantages which could be exploited to deliver satisfactory services to the patients in that, knowledge and experiences of different people are always shared, various problem solving ideas are generated and ultimately the best

options are selected. It is also known to help generate ownership and of course with team work, responsibilities are shared (Garvin, et'al 1998)

#### 2.7.5 Effective Communication - Principle 5

Parasuraman, et'al (1985) define communication is a process by which messages are passed from a sender to a receiver with feedback to the sender. In health delivery there is communication between:

- Health workers and patients
- Health worker and community
- Health worker and health worker
- a) Health worker and patient:

Good communication between health worker and the patient increases compliance to the treatment

given and contributes to client satisfaction.

b) Health worker and community:

Health workers should have regular interaction with their communities to share information on service delivery and their role in healthcare. Special skills are also needed to effectively communicate with the community.

c) Health worker and healthworker:

There should be good communication between health workers to ensure effective dissemination of information, understanding among staff and effective teamwork.

### 2.8 Benefits of Quality Assurance

Quality assurance is beneficial to all and sundry- the client, community, healthworkers, health managers and the health institution. Some of the benefits of quality assurance to clients are good health outcomes, value for money, and less frustration. Benefits to health providers also include the fact that they become more satisfied with team work, health workers understand patients better, information among staff is improved, and workers who perform well are rewarded. Quality assurance brings some benefits also to the health facility in that more patients become satisfied with the services and hence continue to patronize it, the environment becomes clean and beautiful and finally, the facility acquires a good reputation. (Donabedian, 1996)

#### 2.9 Cost of Poor Quality

The cost of poor quality includes all the costs that would not have been incurred if the right things had been done the first time. It also includes costs that results from having to provide the same service again and again. Poor quality results in costs that can be readily seen as well as those that are inherently hidden. (The Quality Assurance Project 2000). Costs of poor quality that are obvious include wrong diagnosis, wrong treatment, and repeated visits to the OPD, prolonged illness and ultimately death. Costs hidden include wasted time to both patient and health worker, unnecessary treatment, wasted drugs, patients not complying to treatment, unnecessary laboratory tests, wasted reagents, frustrated patients, low morale of staff and a poor reputation of the hospital.

## 2.10 Levels of quality assurance

According to Offei (2007), levels of quality assurance should ideally be a top down and unbroken approach starting from the national, regional, district, facility, and then to the departmental level.

## 2.10.1 National Level

Quality Assurance is not another vertical programme. It is an integral part of service delivery and applies to preventive, curative, rehabilitative and support services at all levels. It must involve every department and every health worker. Quality Assurance structures at all levels should derive from existing structures for effective implementation. Support from the national level is crucial to the success of the quality assurance programme. The role of national level is to give direction and support to regions in the implementation of quality assurance. This can be achieved through a QA team or the establishment of a quality assurance unit. This team or unit will serve the following functions

- developing policies and strategies;
- co-ordinating countrywide quality assurance program;
- developing clinical guidelines and protocols;
- setting national standards;
- monitoring quality of care;
- comparing and ranking performance of facilities
- providing technical support to regional QA teams;
- mobilizing resources for quality assurance.

Source: (Regional Health Administration Upper West Region, 1994)

## 2.10.2 Regional Level

The regions have an important role to play in supporting the districts through facilitation, coaching, monitoring and supervision. This is achieved through the regional QA teamby:

- Co-ordination, guidance and coaching;
- Organising quality assurance workshops and seminars;
- Training and facilitation during workshops;
- Monitoring and supportive supervision to health facilities;
- Encouraging high performance by comparing institutions and promoting best practice;
- Developing region-specific standards and adapt national standards
- Giving feedback to districts;
- Establishing reward/incentive systems.

Source: (Regional Health Administration Upper West Region, November 1994)

## 2.10.3 District Level

This is also a very important level that serves to co-ordinate and support health facilities in the district. This is achieved through:

- Co-ordination and guidance to the facilities;
- Promoting QA awareness;
- Monitoring performance of facilities;
- Supporting the training of facilities in quality assurance;

- Encouraging high performance by comparing institutions and promoting best practise
- Organizing training for healthworkers to improve their knowledge and skills

Source: (Regional Health Administration Upper West Region, 1994)

The team should provide feedback to health facilities - hospitals, health centres and clinics.

#### 2.10.4 Facility Level- The Quality Assurance Team

At the facility level it is vital that a quality assurance team, made up of different categories of health workers, is formed to be responsible for co-ordinating the implementation of quality assurance. The team is likely to function better if management shows interest in the activities of quality assurance. The team is responsible for:

- Co-ordinating and providing guidance and information to heads of departments and facility management teams;
- Promoting QA awareness
- Conducting patient satisfaction surveys
- Using facility data to improve the quality of care
- Identifying quality problems and drawing up action plans;
- Monitoring and implementation of quality initiatives and activities
- Producing/adapting/updating relevant local standards, guidelines and protocols
- Disseminating information on quality assurance to staff

Source: (Regional Health Administration Upper West Region 1994)

The QA coordinator of a health facility is responsible for coordinating the activities of the QA team or committee. He/She is the link between the QA team and management. The management

team of the health facility should be committed to quality assurance and should provide all the support needed to carry out quality assurance activities. Managemement should willingly commit the necessary resources to quality assurance. All staff should be aware of the need to improve quality in their routine duties. They should also bring to the attention of the QA team quality issues that are beyond them that require more analysis and planning. Members of the staff assaigned to carry out specific quality improvement tasks should see those tasks as part of their routine responsibilities rather than extra duties. Units with a health center may be reagrded as quality action teams, and solve problems that emerge at the unit level, with every worker in the unit being part of the action team. As action teams, the units should refer problems that requires the acquisition of material inputs to solve may be referred to management. On the other hand, a problem that requires more detailed analysis may be referred to the QA team for it to be solved.

#### 2.11 Who Is A Client?

A client is the one who uses our services. There are two types of clients of a health care facility; internal clients and external clients. Juran,(1992). The internal clients basically constitute the health professionals in the facility. The expectationts of the internal clients must therefore be met. For example, the doctor depends on the laboratory staff to make accurate diagnosis. In this relationship, the doctor is the client to the laboratory staff. Since the ability of a doctor to make accurate diagnosis depends on the laboratory technician, he expects a certain standard of practice from the technician. In the same way, a nurse who collects patients's drugs from the dispensary becomes a client to the dispensary technician. The nurse therefore expects the dispensary technician to provide services that will meet her expectations.

There is the need for a good relationship between the staff providing the service(supplier) and the internal client if quality of care is to be delivered. The external clients are the patients, relatives of patients and anybody who seeks the services from the faciliy. External clients have their own expectations about quality health services and they continue to use the services as long as they are satisfied.

### 2.11.1 The Role of Client in QA

It is important to recognise the roles that external clients can play in the provision of quality service to them. According to the Ghana Health Service (2005), the key roles of the clents in QA include the following

• Definers of quality

Clients are in the best position to tell us their expectations and what quality means to them

• Evaluators of quality

Clients could be called upon to assist us in assessing quality through periodic satisfaction surveys, client complaints and staff-client durbars.

• Co-producers of quality

External clients must not only be seen as users of service but also as partners who are helping to provide quality health care for them

#### • Informants on quality

They provide information on what they experience during the process of care and what the result of care are.

#### • Contributors to Quality Practice

When clients are educated or informed on health matters they can contribute to decision making in the facilities. Once involved in management of the facility, their decisions can help in changing or controlling the behaviour of the staff

#### • Reformers of health services

Through the above contributions, clients play important role in promoting changes in healthcare delivery

#### 2.12 Standards

The term standard is a statement of expected level of quality (Garvin,1998). It states clearly the inputs required to deliver a service, how things should be done (process) and what the output or outcome should be. When a comparison is done between what is expected in the standards and what is done actually, it then becomes possible to identify any quality gaps and make plans to improve upon it.(Crosby 1984). Standards can be set for any level of healthcare system i.e. national, regional, district, and sub district. They can be developed for use in public health, clinical care and support services. There are also international standards e.g. Those developed by the World Health Organization that can be adapted to that of the country

#### 2.12.1 Types of Standards

In carrying out any health activity there are three stages that are followed. Inputs or resources are needed, this is followed by a clear cut definition of how things are going to be done (processes) and well defined result(s). Standards must therefore be set for each of the three areas.

#### 2.12.2 Input Standards

Input or structure standards define the resources that must be supplied for the activities to be carried out e.g, the physical structure, people, equipment and materials. For example to provide outpatient services a building with a number of rooms for consultation, treatment, laboratory etc are needed. Other needed inputs include include trained nurses, medical assistants or doctors and equipment like thermometers, weighing scales, sphygmomanometers e.t.c

#### 2.12.3 Process Standards

Process standards describe the tasks or steps that must be carried out until the activity is completed. At the outpatient department(OPD) for example, the steps include, registration, recording of temperature and weight, consultation and collection of drugs

#### 2.12.4 Output/ Outcome Standards

Output/Outcome standards describe the outputs or results of the activities carried out. For example- the number of patients seen at the OPD. There are a number of standards that have been developed by the GHS and some examples are as follows.

Integrated Management of Childhood Illness (IMCI) case management guidelines

□ Malaria case management guidelines

- □ Tuberculosis case management guidelines
- □ Reproductive health policy and standards and guidelines

As and when these guidelines are developed, the GHS trains all healthworkers concerned on how to implement them (The Ghana health service, 2005).

Bannerman, (2005) gives a typical example of standards for *antenatal care* using the three (3) areas namely, inputs, processes, and outcomes as an illustration below.

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### Inputs standards:

These are measured in terms of quality of physical structure, equipment, supplies and staff.

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#### Physical structure

The antenatal clinic should have a reception and waiting area with adequate seating for women. A separate examination room for history and examination

#### **Equipment and supplies**

Standing scale with Height measure staff Sphygmomanometer Maternal health records Fetoscope Dipstick for urinalysis Measuring tape

Examination table

**Immunization equipments** 

Laboratory for basic tests

**Staff** 

Qualified nurse and midwife support

#### Drugs- Folic acid, Iron, anti-malarials

#### **Process standards**

These are written out in the National Reproductive Health Policy, Standards and protocols, Laboratory standards operating procedure; and Medical records guidelines

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#### **Output/Outcome standards**

The satisfactory result demanded by the GHS is that all pregnant women would have to attend antenatal clinic at least four times during pregnancy and out of that, ninety percent (90%) of would have to give a satisfactory report of care given (client survey).

#### 2.12.5 Uses of Standards

The use of standards will ensure quality care and reduce the differences in managing patients among prescribers. It also ensures value for money. Other important uses of standards are; it defines quality, used to determine inputs, processes and outcome and helps to develop indicators of quality (Bannerman, 2005)

#### 2.13 Monitoring and supervision

In order to assess whether any improvement is being made in the quality of service delivery, it is important to do regular monitoring. Monitoring is the collection, analysis and interpretation of data in order to assess whether any progress towards achieving and improving quality is being made(Arshavin, 1992).Data for monitoring may be from the routing data collected in the facilities and in the communities e.g OPD attendance and immunization coverage.

# 2.13.1 Importance of Monitoring Quality of Care

Monitoring helps to identify gaps in the quality of the health care delivery. It improves lessons to learn as progress is made with implementation. Monitoring therefore helps to identify problems with the adopted implementation plans so as to take the necessary steps in order to achieve the set quality targets.

# 2.13.2 Methods for Monitoring Quality of Care:

There are many methods of monitoring quality. The common ones include:

- Review of routine health information. For example, health management information system on OPD attendance, In-patient admissions and deaths, immunization coverage.
- Client satisfaction surveys
- Patients complaints system
- Critical incidents Adverse events
- Mystery clients
- Supervision-

Source: (Arshavin, 1992)

#### 2.13.3 Client Satisfaction Survey

This is a good way of getting the clients view on the services rendered. It tells what the client expects from the health services. By expressing their expectations and making suggestions, clients indirectly participate in the decision making process of the health facility. It also promotes the use of services that are sensitive to the needs of the clients.

# 2.13.5 Clients Complaints Systems

This is yet another way clients can inform the health facility authorities about the services that are being provided without doing a survey.Some typically employed complaints systems in health facilities include the use of complaints/suggestion box and/or the use of client complain desk. In the latter, a well-trained staff with good interpersonal skills should be in charge of the desk and is made responsible for giving the necessary information and direction to clients, listening to their complaints, documenting them, and following up on the complaints. Most often, complainants have the opportunity of receiving feedback on the spot. Some of the complaints may need further investigation. It is important that feedback is given to the complainant after investigations have been conducted and where the facility erred, apology should be rendered.The records of the complaints is reviewed regularly and feedback given to management and staff.

Records review could also be employed and this involves the collection and analysis of information from existing records and reports. The data collected from for example the Health Management Information System (HMIS) is an important source of information for monitoring quality. Such data can be carefully analysed to improve quality in the facility. Patient records can also be reviewed to see if prescribers are complying with standards, protocols and guidelines.

review of adverse incidences (unusual incidents that occur in the course of duty at the workplace e.g a person collapsing after an injection, adverse events following immunization)

Such an event should be well documented and thoroughly re-viewed immediately after it has occurred with a view to putting measures to prevent similar occurences in the future. The process involves a systematic review of all records on the incident

Mystery clients are also another useful approach. In this approach, the institution engages the services of an individual called the mystery clients who visits the health facility and pretends to be receiving health care services in the facility. Without attracting attention, he or she observes, assesses and at times experiences the quality of services rendered by the staff to clients. The mystery client then reports his/her findings to the institution for analysis. The nature of the task of the mystery client requires that he/she must be confident, accurate and reliable. He/she must also have good memory in order to reproduce what was observed and experienced in an unbiased manner after the process.

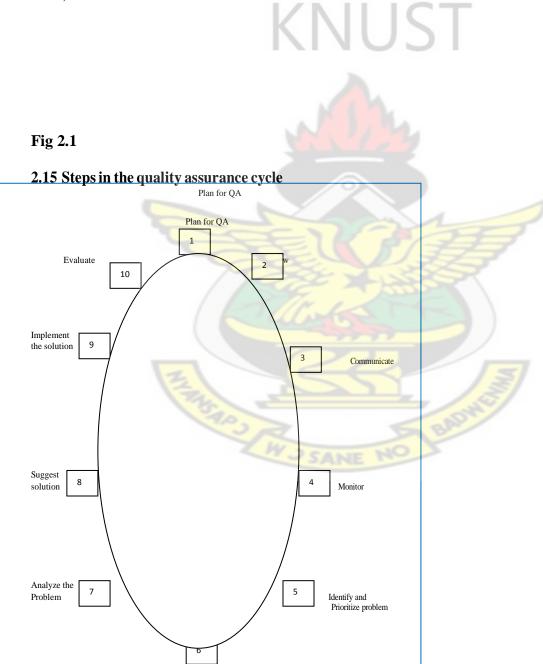
#### 2.14 Supervision

Supervision in terms of health care is the process of guiding, helping and teaching health workers at their workplace to perform better. workplace to perform better. (Offei, 2009). It involves a two-way communication between the one supervising and the one being supervised...Adequate preparation should be made in terms of planning and budgeting the visits. At the end of the visit, the supervisor should be make time to discuss with staff their findings and agree on the actions to take to improve on performance. A report must be written by the supervisor and feedback sent to the staff. (Offei, 2009)

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# 2.15 The Quality Assurance Cycle

The process of QA follows a systematic procedure that must be adhered to for quality to be guaranteed in any health institution. The steps required are summarised in Fig 2.1 below (Garvin, 1998).



#### Define the problem

Garvin, Stephen et'al (1998)

As can be seen in figure 2.1 above, there are ten main steps in the QA cycle; and it is important to note that to succesfully use these steps, team work and effective communication is absolutely crutial.

#### 2.15.1 Plan for Quality

Planning for quality is not an individual task but should be done by the whole QA team. It is the task of this team to carefully plan activities that will facilitate the implementation of QA activities in the facility. A budget should be prepared with the plans so that resources are committed for quality assurance. The activities should be well organized, systematically carried out and properly coordinated.

### 2.15.2 Review Standards

As already indicated, standards are needed to check whether the facilities activities meet client and professional expectations. Standards are usually set at national level but can be adapted for the lower levels. Protocols and Guidelines can also help to improve the quality of the services, and as such every quality conscious institution should make a list of some of these guidelines and protocols

#### 2.15.3 Communicate Standards

Communication plays a very important role in QA. Whatever decision the team takes, communication plays a very important role in QA. Whatever decision the team takes must be well understood by all members and properly communicated to other staff. It is important to communicate these standards set by the facility to all members of staff. For example all prescribers in the facility should know about existing guidelines and protocols and comply accordingly. Each facility may have its own effective way to communicate information to staff. Examples include meetings and durbars.

#### 2.15.4 Monitor the Use of Standards

Once the standard, protocols and guidelines are in place, the next step is to monitor to see whether they are being adhered to or not. For example, one can always check to see whether the temperature is taken and recorded for malaria cases. The main aim of monitoring is to check for compliance to standards

#### 2.15.5 Identify and Prioritize Problems

Some of the problem areas are related to patient satisfaction, poor prescription habits, infection control practices etc. Since all these cannot be solved at the same time, there is the need to prioritize. It should be possible to determine priority problem areas as well as opportunities for improvement. It may be helpful to first select the simple ones that we have resources to solve. Once appreciable results are realised, management are encouraged to do more.

#### 2.15.6 Define the Problem

Once the problem areas have been identified, the next step is to define them. They can be stated as problems. A good problem statement does not assaign reasons or blames people (Garvin, 1998)

#### 2.15.7 Analyze the Problem

Every problem has got its underlying causes. This means that analysis would have to be done to find out the root causes to the problem. Simple methods for problem analysis include brainstorming and drawing simple tree diagrams (Garvin, 1998).

#### 2.15.8 Suggest/Develop Solutions

After anlyzing the problem, the team then suggest ways of correcting the problem. Again, this can be done through brainstorming to gather a lot of possible solutions. The facility can also find out how other facilities with similar problems addressed them. The solution should however be practicable and should be within the available resources (money, material, human). Once the facility gets to the root cause of the problem, its solution becomes easy.

#### 2.15.9 Implement Solution.

First develop an implementation action plan. The action plan spells out the activities on the solutions, persons responsible, time frame for each activity, resources required, expected output and how it would be monitored. It is helpful to assaign people to specific tasks even though its seen as a team work. The person responsible for a specific task shold be clear about the dictates of the task and the time to report to the team.

#### 2.15.10 Evaluate.

At the end of the agreed period the team should check whether it has achieved the goals set. For example, if the cases of caesarian cases over the last year has improved the current year in absolute percentage terms.

#### 2.16 Barriers to quality assurance

A barrier can be seen as something that prevents another from happening. It can also be viewed as a hindrance or an obstacle. The single most important condition for success in quality assurance is the determination to make it work. If health providers are truly committed to quality, then almost any reasonable method will work.

Brown, (2005) stipulates several barriers that make it difficult to apply the principles of quality assurance. These barriers threaten the success of quality assurance and must be prevented or removed. These include the non-commitment of management to quality assurance, poor staff patient relationship, lack of team work etc.

Other barriers include poor understanding of the concept of quality, poor communication among staff, the natural reluctance of people to change due to the uncertainties they bring, low staff morale/motivation and weak supervision

# 2.21Conclusion

This chapter focused on defining what quality in general meant as far as services and for that matter health services are concerned. It also went into what authorities on quality, both locally and internationally have stipulated to be the essential ingredients in the concept of quality and quality assurance in any serious health institution. It sought to underscore the fact that quality assurance is an all inclusive effort which includes every stake holder, both within and without the health industry. The process of implementing quality assurance cycle in an organization was also looked at, and finally how to manage change within that context.

#### **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

The study seeks to evaluate the service quality practices in the Ghanaian health Industry using a case study of Akuse Government hospital. Both qualitative and quantitative approaches are employed to address the primary objectives of the study. Descriptive analyses of service quality practices are carried out and econometric assessment of the relationship of the service quality practice on firm performance is performed.

#### 3.1 Research design

The design of this study will follow the survey method. The methodology (questionnaires and interviews) provides a good means for asking people to provide information about themselves; their attitudes and beliefs, demographics and other facts, past or intended for future behaviors (Cozby, 2003). The Survey method is very useful in the examination of many social topics and can be particularly effective when used in conjunction with other methods. Typically, the survey method has overtime proven to be very useful in examining a sample from a population. --The main purpose of using the survey method is to ensure that any subsequent assessment of the attributes of that sample population are accurate, and the findings can be generalized. In other words, they have population validity. It promotes replication later by other researchers and/or among other samples and subgroups. In this manner, the ability of generalizing the findings can be tested and retested. For the purposes of this research, the self-administration technique was

adopted. This option will be adopted based on the opportunity it will create for meeting respondents and persuading them for more and timely responses.

#### **3.2** Choice of study

For the purposes of this study, Akuse Government Hospital was used as a case study. The choice of this facility is informed be several factors including the fact that it serves a significantly large area of the Dangbe East and West catchment areas. More so, it placed the runner up behind Dodowa Health center in malaria and HIV/AIDS treatment ranking that was recently made by the Ghana Health Service. Again, it is one of the oldest hospitals in Ghana, indeed Akuse Government Hospital is celebrating its centenary anniversary this year (2011) and using it would serve as an index of the quality standards expected of the relatively newer hospitals and if there are any shortfalls, attempts are made to correct them. The data analysis aimed to identify and interpret a majority consensus amongst respondents in their ratings of the quality factors.

#### 3.3 Sampling procedure

#### 3.3.1 Study population

The study population refers to the group the researcher wants to study into, from which the study sample would be drawn. This is often defined in terms of demography, geography, occasion time, care requirement diagnosis or some combination of the above (Freeman, 2004).

The target population for this study constitutes the inhabitants of Akuse and its surrounding communities. The data collected for the study is based on client's assessment of quality of health services

#### **3.3.2 Sampling Units**

The sampling unit refers to the objects or participants that form the subject of the study. The identification of the sampling units begins with the identification of the study population. The identification of the population of the research in question will help in narrowing down to the specific objects that are the subject matter of the investigation. For the purposes of this research, the study population comprises a cross section of the clientele base of Akuse Government hospital. The study was conducted in the hospital and the communities within the hospital catchment areas. The patient satisfaction survey, inpatient satisfaction survey, rational use of medicines and professional indicators were performed in the hospital facility. The community survey was conducted in the following communities; Akuse, Amedeka, Asutuare, Dormeliam, Natriku and Kadjanya. The Akuse community was divided into three zones and VRA quarters were included for the first time in the survey. Between January and June 2011, clients who attended the facility were enrolled in the survey.

Clients who had not visited the facility between January and June 2011 as well as clients who were not from the selected communities were excluded from the community satisfaction survey.

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#### 3.3.3 Sample Size

A study sample refers to a subset of the population that the researcher is interested in. In other words, a sample describes the participants selected for a research project. A sample is selected with care to first and foremost ensure that the population under study is fairly represented. In the words of Saunders (1997), the size of the sample and the way in which it is selected will

definitely have implications for the confidence one can have in the data collected and the extent to which one can generalize. This selection will be informed by a consideration of factors such as costs (time and money), the population size and factors relating to effective representation of the entire population. A total of 100 clients of the facility were administered with the questionnaire for the survey (n=100)

# **3.3.4 Sampling Strategy**

The data collection is done using questionnaire survey. The stratified and simple random sampling strategy is used in the selection of the sample for the study. The respondents are categorized into strata and from each stratum a proportional representative sample is selected based on the simple random sampling procedure. The total attendance from January to June 2011 formed the basis of allocating weights. However, more weight were allocated to the inpatient who were used for the QA monitoring survey since they have been in the hospital for at least a week and are in a better position to access the QA activities in the facility. Five (5) in-patients were selected using the convenient sampling technique from each of the four wards namely. Child (i.e. their care givers), male ward, female ward, and accident and emergency ward. The number of respondents selected per catchment area is based on the sample weight computed as the share of each catchment area in the total number of attendance received during the period. The below is the breakdown of the sample selection by strata.

# FIG 3.1 WEIGHT ALLOCATION TABLE AS PER ATTENDANCE OF PATIENTS

Strata	Total	Weight	Sample	
	attendance	_	_	
	(Jan-June,			
	2011)			
Akuse zone 1	2556	30%	30	
Akuse zone 2	1704	20%	20	
Akuse zone 3	1278	15%	15	
Kadjanya	256	3%	3	
Dormeliam	426	5%	5	
Asutuare	426	5%	5	-
Others	170	2%	2	
In-patients for	1704	20%	20	
QA monitoring				
Total	8520	100%	100	

# **BETWEEN JAN TO JUNE-JUNE 2010**

# Source: Akuse Government Hospital, IT department.

For the definition of variables at this stage please see questionnaire- the study will consider two

broad categories of variables: demographic characteristics and service quality variables.

# 3.4.0 Data sources

The study used both primary and secondary data in the analysis. The choice of this data source was informed by the objectives of the study.

# **3.4.1 Primary Data**

The primary data is obtained from the survey of the selected respondents. The primary data will seek to provide current evidence on the area of research.

# 3.4.2 Secondary Data

This data is readily available at the hospital records department and areas of interest that were explored into included various variables as far as child health department, medical department, surgical theatre, OPD/Casualty, and quality assurance indices. These records were compared with the previous years for trend variations.

#### 3.4.3 Quantitative Data

The data for this study is largely qualitative but the procedure of scaling and coding is used to convert it into a Quantitative data.

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#### **3.4.4 Qualitative Data**

# Under this category, data on measures that cannot be quantified in numerical terms will be examined. Some of the issues that will be covered include customers' assessment of the following: Staff's wiliness to assist patients, whether they were clearly made to understand their disease conditions and how it was being managed, the environment within which they were receiving treatment etc

#### **3.5 Instrumentation**

A self-administered questionnaire was used to collect the primary data for the research. Much of the data collected from this source will largely direct the conclusions, as these will provide the bulk of the empirical evidence. The survey instrument was designed taking into consideration current developments in the Ghanaian health sector and by reference to existing literature on health services marketing and service quality imperatives.

#### **3.5.1** The Questionnaire Design

Not only was the questionnaire designed with the view to ensuring that relevant and required data was sourced from respondents, but also the adequacy of the data in meeting the study objectives will be considered. The research questions were constructed using simple and clear statements to avoid ambiguity. Principally, a structured and closed type of questions was used for the entire questionnaire. This approach is preferred to facilitate ease of responding and also to focus particularly on the pertinent issues that emanated from the selective review of the literature.

#### 3.6 Data analysis

Descriptive statistical techniques will be employed, using measures of central tendencies (averages) are used in analysing responses and the times data. These were supported by tables, chart and graphs so as to provide for easy illustrations and comparisons.

#### 3.6.2 Data presentation and analysis

A tally of the various responses gathered was made and then transferred to Microsoft excel. Using excel, a special formula was used to work out the percentages. After working out the percentages, statistical analysis methods such as tables, graphs, pie charts were extracted to aid in the search for the relationships between the research variables. The close ended nature of the questionnaires made it possible for easy comparisons to be made, as responses were predetermine. The previous year's data was also brought in to compare with the current year. This is because there is the need to compare with the past records to check if there has been an improvement or a decline in the quality of health care after comparing, problem areas were highlighted and possible suggestions were made on how to solve those problems.

#### **CHAPTER FOUR**

#### PRESENTATION AND ANALYSIS OF FINDINGS

#### **4.1 Introduction:**

This chapter presents analysis results obtained questionnaires and interviews that were administered. Graphical representation of these data was made to provide clear understanding.

#### **4.2 Presentation of findings**

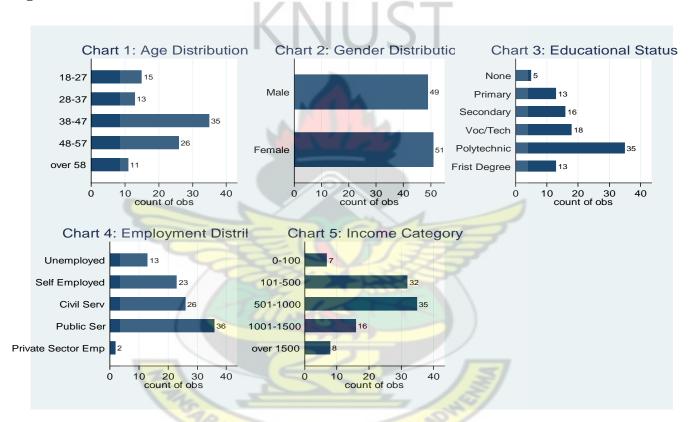
This chapter focuses on the analysis of survey (questionnaires) carried out to collect data from patients attending Akuse Government Hospital. A total of 100 questionnaires (Eighty to OPD patients and twenty to in-patients) were administered to patients and all were retrieved from respondents, representing 100%.

# 4.2 Demographic Characteristics of Sample

This section performs analyses of the demographic characteristics of the respondents and their relationship with perception of service quality. Chart 1 in figure 1 below shows the distribution of ages of respondents. From the chart the modal and median ages are between 38 and 47 years respectively. About 11% are over 58 years and not more than 15% are between 18 and 27 years. The chart on gender (chart 2) indicates a fair representation of male and female in the clientele base of the hospital. 49% of the respondents are male while 51% are females. From chart 3

significant numbers of the respondents have some level of education with the modal educational level being polytechnic education. 13% of the respondents have first degree education. Respondents with secondary and vocational educational certificate are 16% and 18% respectively. Only 5% did not posses any academic qualification. The figure further illustrates the distribution of employment and income statuses of the respondents.

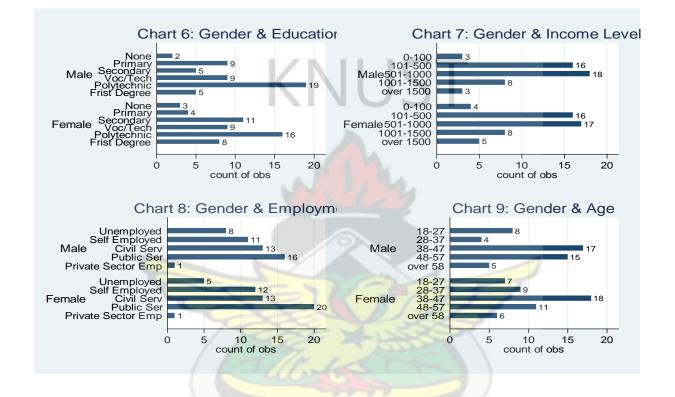




The results displayed in the figure suggest among others that most of the respondents were government sector, self employed and unemployed... A cross tabulation of the demographic characters are illustrated in figure 2 below. The result from chart 6 on education and gender suggest a fairly even outcome for male and female in terms of education levels. The modal classes for both sexes are polytechnics with a less than 10% of the respondents in each case pursuing university education. Chart 7 shows the distribution of income levels by gender. It

indicates no clear disparity in the distribution of incomes across male and female customers. The average, modal and median incomes for both sexes are about the same. The other characteristics-employment and age are fairly the same for male and female customers.

# Figure 4.2



# TABLE 4.1- REPRESENTING PERCENTAGES OF OUT PATIENT INTERVIEWS

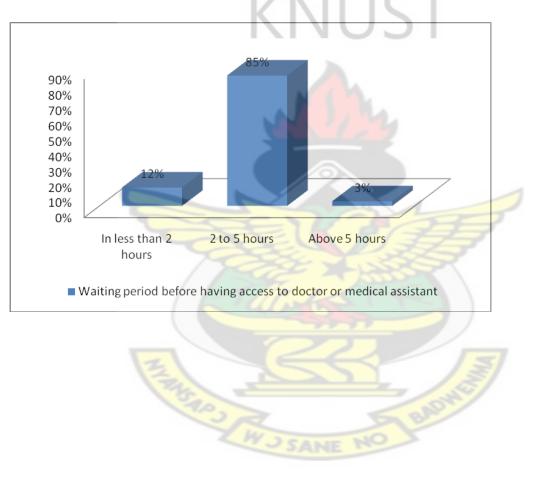
Indicators	In less than 2 hours	2 to 5 hours	Above 5 hours
Waiting period before having access to doctor or	12	85	3
medical assistant	1.		

Indicators	Yes	No
Whether patient was examined by the doctor	77(96%)	3(4%)
Whether doctor informed patient about his/her disease after diagnosis	40(50%)	40(50%)
Whether doctor gave instructions about the illness	53(66%)	27(34%)
Whether doctor told patient to return or not	51(64%)	29(36%)
Privacy during consultation	75(94%)	5(6%)
Whether patient received all drugs prescribed	70(88%)	10(12%)
Whether patient understood all instruction from pharmacist	80(100%)	0(0%)

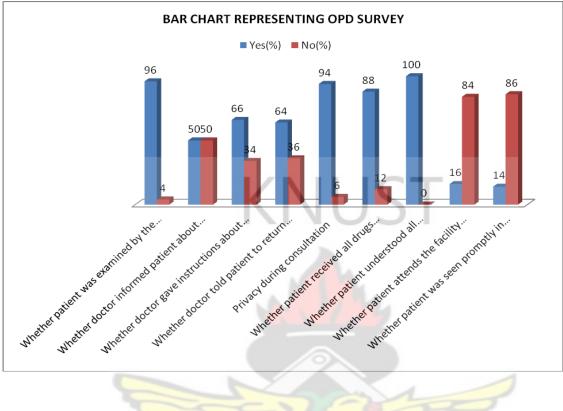
Whether patient attends the facility during emergency	13(16%)	67(84%)
Whether patient was seen promptly in the emergency	2(14%)	58(86%)

Indicator	Very good	Good	Poor
Attitude of staff towards patients	50(62%)	30(38%)	(0%)
Cleanliness of the hospital and surroundings	54(68%)	26(32%)	(0%)
Overall patient satisfaction from day's visit	38(48%)	40(50%)	2(2%)

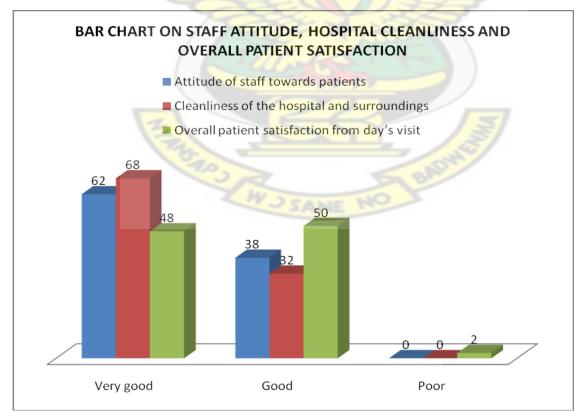
# FIG.4.3 BAR CHART OF OPD PATIENT SATISFACTION SURVEY











### 4.3 OUT PATIENT SATISFACTION INTERVIEWS

Patient's assessment of the efficiency of services provided by a hospital is an important index of patient satisfaction. In view of the positive relationship between patient satisfaction and health outcomes, satisfaction or dissatisfaction in the hospitals as assessed by patients provides opportunity for improvement or change. One of the major issues confronting patients is the matter of how long they have to wait before seeing a doctor. The hospital did not perform well in this area, seeing only 12% of the patients in less than 2 hours as opposed to 60% in the year 2010. The average waiting time of patients in the study was 2 hours 53 minutes (173 minutes) which appears similar to the findings at Akosombo VRA hospital (2 hours 40minutes in). The similarity should not be misconstrued as a normal phenomenon and tackled with all the seriousness it deserves. Infact the waiting time of patients at Dodowa Government Hospital is 73.9 minutes within the same period.

It is however important to make the point that worldwide, there has not been any consensus on acceptable waiting time of patients. This is because, a doctor might in some instances take even up to an hour examining a single patient and any attempt to enforce a waiting time would only lead doctors to do a shoddy work on the patients to get rid of them as soon as possible. It is therefore important for patients to be educated on the critical nature of their health and be told to exercise patience for their turn as the doctor examines who queued before them. Having said that, the onus still lies on the hospital authorities to ensure that the systems are running efficiently so as not to unnecessarily delay them. A good number of the patients sited the records and pharmacy department as where they were delayed the most. A holistic view of these two departments must be taken and any bottleneck situation must be identified and eliminated.

Again it must be emphasized that, like the doctors consultation time, there is no agreed time at the pharmacy department since it is important first of all for patients to get full information on their drugs and secondly due diligence must be exercised by the pharmacy staff since a single mistake on their part can

easily claim a life. A mistake from the doctor can be identified and corrected at the pharmacy but a mistake at the pharmacy definitely goes unnoticed. It is also important to take a look at the number of doctors at post because all other things being equal, the more doctors available, the lesser time patients have to wait.

By this study therefore, one recommendation to the Eastern Regional Health Directorate is for some more doctors to be posted to the facility. One of the reasons for this poor performance too could be attributed to an almost doubled patient population over the 2010 numbers. Even though the hospital has to take proactive measures to accommodate the expected increases, the other health centers around have over the years not helped in the matter at all. They are very quick to refer patients to Akuse since it is of the status of a referral center. In most cases, the patients who are referred to Akuse could have actually been managed by the smaller health centers. Training and education to them is recommended to solve the problem.

On the issue of whether patients were examined, a result of 96% is impressive but again the ultimate should be 100%. Doctors must at all times examine their patients physically even if the patient had attended the facility within a short time interval since their state of health could change at any time and it is indeed through examination that the doctor can pick up signs of any deterioration in the health status of the patient. It also leaves a psychological impression on the patient that he/she has been well taken of and that alone can in no small way facilitate the healing process of such a patient. Beyond examination, it is inconceivable for a patient to visit a doctor and leave without being told exactly what is wrong with him/her. It's definitely an unprofessional practice that must be discouraged in all hospitals pursuing quality assurance. AGH really scored very low with this 50% score compared to 76% from the previous year's survey. Even though this problem could be attributed to forgetfulness on the part of prescribers probably due to increased work load the larger issue boils down to putting in the efforts to

improve on professionalism at the facility. Doctors must be impressed upon to have a personal relationship with each patient and treat them the way they would treat one of their relatives. The vision and mission of the facility should be spelt out clearly to any new doctor posted there and appraised by the human resource department on regular basis as to his/her performance in some of these categories. To make matters worse, some of the clients also do not give adequate information about their disease during history talking and consultation and just as patients are educated to request from doctors to tell them their illness, they also have the responsibility to disclose all information about them to the doctors.

In the last year's survey, one of the problems identified was that patient were not told to return or not. It appears that much work was not done to address this problem since only 64% said they were given that information as compared to 58% last year. This was achieved through the adoption of the mystery patient strategy who was to basically investigate how services were rendered. Since doctors got to know that management was into that, they were all cautious in handling every patient since they never can tell who a mystery patient was. Even though it is a risky and expensive venture, its adoption should still be continued. 94% also said they had privacy during consultations to be intruded in by other staffs, visitors of the doctors and so on and the sad aspect of it is that, they sit in all through the consultation, listening to otherwise confidential information of the patients. The doctors have to be educated on this point. Patients must also be educated to know that privacy during consultation is their right and therefore when this is violated they must take action to correct the situation. 88% of the clients interviewed received all drugs prescribed and all of them clearly understood pharmacy instructions. These findings are not significantly different from that of 2010. This means that the structures put in place to monitor the above arrears are working well.

Drug availability is an important issue in quality assurance and the pharmacist must ensure that essential drugs must all times be available. Being the chairman of the drugs and therapeutic committee, he/she must make arrangements for tenders to be released on need basis taking cognizance of the minimum reorder levels. Thankfully, today, there are so many pharmaceutical companies competing to supply medicines to the hospital and as such the hospital must take advantage to ensure all year round availability of medicines. One other area that has to be tackled is to inform doctors to prescribe drugs from the Essential Drugs List (EDL) approved by the GHS. This would enhance the probability that the drug prescribed would be available at the pharmacy.

There was an improvement in the overall staff attitude. 62% of the clients interviewed said staff attitude was excellent as oppose to 30% in the year 2010 possibly due to the introduction of the best employee award in 2010 where the best employee walked away with a brand new KIA picanto. Another area that saw improvement was the overall satisfaction. Forty Eight percent of the clients interviewed were very satisfied as compared to 38 percent from 2010 survey. More can however be done to improve on such positive developments.

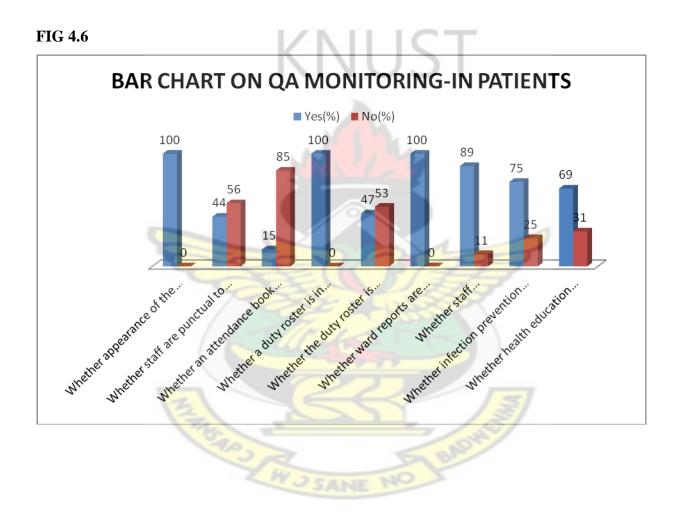
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# 4.4 QA MONITORING SURVEY

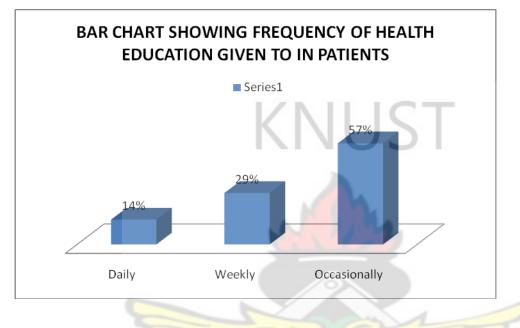
Indicators	Yes	No
Whether appearance of the staff was satisfactory	20(100%)	0(0%)
Whether staff are punctual to work	9(44%)	11(56%)
Whether an attendance book is in place	3(15%)	17(85%)
Whether a duty roster is in place	20(100%)	0(0%)

Whether the duty roster is adhered to	9(47%)	11(53%)
Whether ward reports are available	20(100%)	0(0%)
Whether staff meeting/durbars are held regularly	18(89%)	2(11%)
Whether infection prevention measures were practiced	15(75%)	5(25%)
Whether health education talks were given to patients	14(69%)	6(31%)

Frequency of health education	Daily	Weekly	Occasionally
	2(14%)	4(29%)	8(57%)





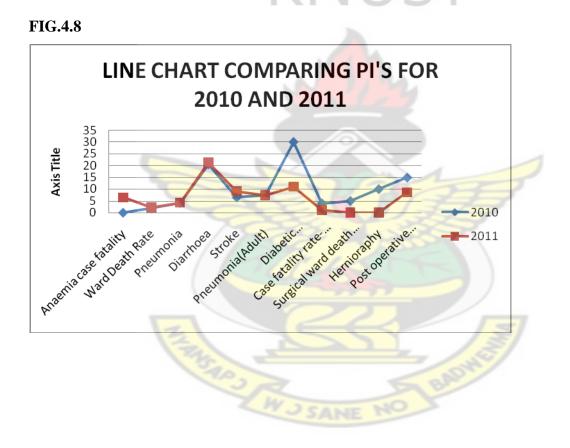


A total of twenty clients who were on admission during the period of study were enrolled for the QA monitoring study. From table 4.2, all patients said the general appearance of the staff was satisfactory. 44% of staff was punctual and only 15% knew there was an attendance roster in place. Again, even though all in patients admitted that there was a duty roster in place, only 47% admitted that it was being adhered to. 89% said staff meetings were held regularly but a more important observation was that patients said infection prevention were only 75%, below the eastern regional target(ER) of 100%. The staff however performed creditably on patient education.

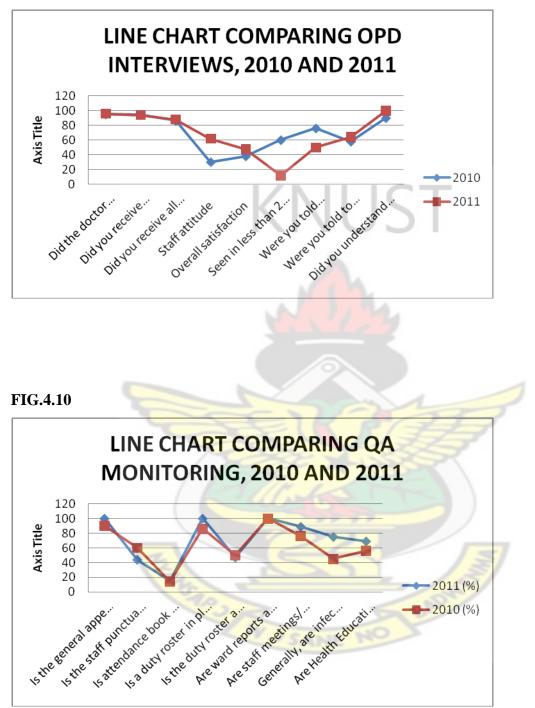
The QA monitoring survey was intended to find out from the inpatients whether or not policies put in place with respect to quality were being implemented and if so, is the desired change in the facility being achieved? Most of the patients (56%) interviewed said health workers in the facility were not punctual to their duty posts. It is incumbent on the QA manager and his/her team to put in place policies directed at rewarding punctual workers and sanctioning those who report late. According to the study, the facility performed so well with the questions" are ward reports available?" and are staff meetings held regularly?". There was 100% response in the affirmative. These are definitely good developments which should be continued. Staff durbars provide the opportunity for the staff to interact with management so that challenges they face are brought to their attention. It also allows for conflict resolution and generation of ideas intended to help make the system run more efficiently. Akuse Government Hospital performed creditably, above most of its compatriots with the 89% score and should be encouraged. Patient's education is also a matter of concern which should be improved directed towards 100%, the ultimate Eastern regional target for all regional and district hospitals. As quality assurance is being practiced by the facility, it is critical to find out using the professional indicators (PI's) whether an improvement in the way things are done has translated into positive benefits. The facility also recorded an Anemia case fatality rate of 6.4 as against 0 in the previous year under child health. Most of these children were brought to the facility at the terminal end of the disease. For example three of them had just been placed on blood transfusion when they passed away. Two of them were given group specific uncrossed matched blood all in attempt to save them. The facility also recorded increases in the following indicators: ward death rate for child health 2.3%, pneumonia case fatality rate 4.2%, and diarrhea case fatality rate 21.2% etc.

Cerebrovascular accident (CVA) or stroke 9.1%, case fatality rate of pneumonia 7.4% etc all under medical cases. It is worth nothing that that there was a reduction in case fatality rate of diabetic ketoacidosis 30% to 11.10% and case fatality rate for malaria from 3.95% to 1.2%.

There was marked improvement for most of the indicators in surgical /theatre as compared to the previous years. For example surgical ward death rate reduces from 5.0% to 0%, heriorrhaphy wound infection rate decrease from 10% to 0% and the proportion of post – operative patient who develop major complications from 14.9% to 8.6%. In fact, this study goes to corroborate the importance of QA in each and every institution as most of the professional indicators mentioned above saw a tremendous improvement over last year's results-as shown in **FIG.4.8** below







#### **CHAPTER FIVE**

#### SUMMARY, CONCLUSION AND RECOMMENDATION

#### **5.0 Introduction**

This chapter provides a general summary and conclusion for the study, as well as recommendations for policy analysis and further studies. At the end of the chapter, limitations of the study are provided.

#### **5.1 Summary of the study**

This study was conducted at Akuse Government Hospital on patients who attended the facility between January to June, 2011 to find out the extent to which the hospital is conforming to quality of care standards spelt out by the Ghana Health Service, the extent of patient satisfaction of the health service they have received and to relate quality of care to the professional indicators generated at the hospital. The chapter two stressed on defining what quality meant in general with particular emphasis on quality assurance and how it can be achieved in any organization. It also shed some light on the cost of poor quality, and indeed the reason why quality should be mandatory and not an option in healthcare.

To achieve the research objectives, the study employed the survey method where structured questionnaires were administered to eighty outpatients and another twenty to inpatients. The results were analyzed using Microsoft excel for easy interpretation.

The results indicated that the hospital has over the years improved on many of the quality indicators and hence it reflected positively on the professional indicators used in the study.

#### **5.2 Conclusion**

The hospital performed creditable well in most or the indicators. There was an improvement over the previous year's quality assurance survey. The improvement in staff attitude and the overall satisfaction in the community and outpatient satisfaction survey suggest an improvement in the quality of care.

However, areas such as unnecessary delay, client not told about their diagnosis and clients not given instructions about their illness did not see any significant improvement.

The QA monitoring survey revealed that most of the patients were dissatisfied with the punctuality of the staff. Also infection prevention measures should be strengthened. Patient education on health related matters is also an area that calls for improvement

In the professional indicators survey, the facility improved on all the indicators under reproductive health except maternal mortality ratio. There was an increased in ward death rate and anemia case fatality rate under child health. The facility also recorded increases for the following indicators: ward death rate, case fatality of CVA, case fatality rate of pneumonia etc all under medical cases.

It is worth nothing that there was a reduction in case fatality rate of diabetic ketoacidosis and case fatality rate for malaria.

There was marked improvement for most of the indicators in surgical / theatre as compared to the previous years. For example surgical ward death rate reduced, heriorrhaphy wound infection rate decreased and the proportion of post – operative patient who develop major complications also reduced.

This is a clear indication that the interventions and measures put in place at surgical theatre yielded the desired result.

In all the facility has improved remarkable in quality the quality assurance and quality of care despite the enormous difficulties that bisect the hospital. With the right interventions and determination on the part of management and staff, the facility would improve the health status

of people in the catchments area through provision of quality and affordable health care service delivered by friendly, motivated and skilled personnel as it mission statement says.

#### **5.3 Recommendation**

From the questionnaire administered, data analyzed as well as careful scrutiny of the findings, the researcher puts forward the following recommendations:

## ✓ Total commitment and support from top management

One of the tenets of total quality management (TQM) is the commitment to quality from the top of the organizational hierarchy to the bottom. This is the only way the other lower ranking members of staff would see the seriousness of the whole issue of the need for quality in the delivery of their service. As such there would be a concerted effort at achieving excellence in all aspects of service delivery at the hospital.

## ✓ Staff reorientation and training

It is important to develop a good human resource policy that would ensure that all new recruits are properly on the modus operandi of the facility. Not only that, but also existing employees should be taken to refresher courses related to quality delivery. In this regard, management must ensure that a comprehensive training programme is put in place for training and retraining of all employees, especially managers and supervisors to enable them acquire the necessary skills to deliver only the best to the clients.

# ✓ The hospital should put in place an efficient system of routinely collecting information relating to customer satisfaction.

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Electronic questionnaires should be provided at each and every department that a patient gets into contact to and patients should be encouraged to complete them as they receive their service. This should be fed into a central database, monitored by the chairman of the quality assurance team to enable prompt action to be taken on persistent areas of underperformance. Also suggestion boxes should be provided to allow patients freely express their opinion on issues that affect them.

## ✓ Initiation of a performance appraisal system for all employees

It is absolutely important that all persons in the hospital irrespective of your rank should be appraised. The appraisal process which should be seen to be fair should be done at the hospital level, then at departmental level. Good performance should be awarded and in a similar way mediocrity should be punished.

The hospital's staff should undergo training in the Quality Assurance manual especially the Q.A team. The hospital management, heads of units and Quality Assurance team member should draw an action plan based on the finding. The Quality Assurance team should strengthen and well resourced to implement the plan.

## ✓ Clinical audits and mortality meetings

The QA team must also take issues relating to mortality meetings and clinical audits very seriously since it is one of the surest ways to know whether interventions made towards QA are indeed producing good results as far as the professional indicators are concerned. Most GHS institutions do this on Fridays; however the frequency is determined by management.

## **5.3 Limitations and Suggestions for Further Studies**

The limitation of this study is that the result should not be generalized due to some sample biases. Furthermore, a small sample may not be the representative of the whole population and hence, in future, the research can be conducted by taking a large sample to facilitate a robust examination of the service quality. The future study can also be conducted to identify the relative importance of each dimension of service quality namely access, equity, safety, efficiency, technical competence etc. The extension of this study can also include the providers (health workers) perspective to have a better understanding of the problem domain.



## **REFERENCES:**

- Arshavin, P. (1992) "The concept of quality health care", 2<sup>nd</sup> edition, Churchill Livingstone Page 103,116-118
- 2) Handbook on quality in the health services, Marshfield, MA: Pittman Ackon
- E.K, "Internationally accepted standards of patient care" (2009), 1<sup>st</sup> edition, Bailliere, Tindall and Cox, Page 25
- The Ghana health service expert guidelines towards in excellence in health care, 2005 edition, Pages 12,15,20,21-22
- 5) Garvin, Stephen et'al (1998). Total quality management. Strategies and techniques proven at today's most successful companies (2<sup>nd</sup> edition). New York: Wiley. [The portable MBA Series]
- 6) Juran, J.M. (1992). Quality by design. The new steps for planning quality into goods and services. New York: Free Press
- Crosby Phillip. B. (1984). Quality without tears. The art of hassle free management. New York: McGraw-Hill.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L. (1985). "A Conceptual Model of Service Quality and its Implications forFuture Research'. Journal of Marketing. 49, p.41-50.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L. (1988). 'SERVQUAL: a Multiple-item Scale for Measuring ConsumerPerceptions of Service Quality'. *Journal of Retailing*. 64(1), p.12-40.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L. (1990). "Guidelines for Conducting Service Quality Research'. *MarketingResearch*. December, p.34-44.

11) Parasuraman, A, (1998). 'Customer Service in Business-to-Business markets: an Agenda for Research'. *Journal of Business & Industrial Marketing*. 13(4).

12) Bannerman, C; Tweneboah, N.T; Offei, A; Nicholas, T.A; Acquah, S; (February 2002): *Health Care Quality Assurance Manual*.

13)Brown, Lori Di Prete; Franco, Lynne M; Rafeh, Nnadwa; Haatzell, Theresa: *Assurance of Health Care in Developing Countries*. Bethsaaida, USA(USAID).

14)Donabedian, Avedis, (1996). *Evaluating the Quality of Medical Care*. Milbank Memorial Fund Quarterly 44: 166-203

15)Ghana-Denmark Health Sector Support Programme Ministry of Health-Upper West Region (September 1996): *An introduction to Quality care.* 

16)Quality Assurance Programme, MOH Uganda. *Quality Assurance for Health Workers in Uganda.*Manual of Quality improvement methods.

17)Offei, A; Sagoe, K; Owusu Acheaw, E; Doyle,V; Haran, D; *Health Care Quality Assurance Manual for a Regional-Led, Institutional -based Quality* Assurance Programme. Eastern Regional Health Administration & Liverpool School of Tropical Medicine.

18)Regional Centre for Quality of Health Care, (February 2001:) *Improving Quality of Health Care. Foundations in Quality Assurance (Participant Manual)*. Institute of Public Health Makerere University Medical School, Kampala, Uganda/Quality Assurance Project, Centre for Human Services, Bethesda, USA(USAID)

19)Regional Health Administration Upper West Region (November 1994). *Health Care Quality Assurance Manual*. Ghana-Denmark Health Sector Support Programme. 20) The Quality Assurance Project (2000). Developing standards for Quality Health Care.

21)Weaklim, D (1994). *Development of Quality Indicators Based on Patients' Perceptions of Quality for Health Service Monitoring at Health Centres in Ghana*. Collaborative work between the Liverpool School of Tropical Medicine and the Eastern Regional Health Administration.

22)Tweneboah, N. A; Opoku,S.A (August 1998). *Implementing Quality of Care at the sub-district*. Ghana-Denmark Health Sector Support programme Ministry of Health

24 Akuse Government Hospital, IT department.



## **APPENDIX 1A**

## **Research questions:**

Please take a few minutes to complete this survey. Your specific answer will be completely confidential, but your views, in combination with those of other, are extremely important

Demographic	Characteristics
1. Age 18-30	○ 21-40 41-50 41-60 61 and above ○
2. Gender Male	Female
3. Educat	ional status
None	JHS and below SHS/OLevel/ A level ODiploma
First D	egree O Post Graduate Degree
4. Employ	yment status
Unemp	bloyed Self employed Civil Servant Public servant
Private	e sector employee
5. Averag	ge monthly Income level (in GHC)
0-100	$\bigcirc$ 101-500 $\bigcirc$ 501-1000 $\bigcirc$ 1001-1500 $\bigcirc$ Over 1500 $\bigcirc$

Health facility:....

Date:..... Patient No .:....

1.

How long did you wait before you saw the Doctor/Medical Assistant (MA)? Hours/minutes......

QUESTION	YES	NO
2. Was there any unnecessary delay before you saw the Doctor/MA		
3. Did the Doctor/ MAexamine you?		
4. Did the Doctor/MAtell you what is wrong with you?		
5. Did the Doctor/MAgive you instructions about your illness?		
6. Did the Doctor/MAtell you whether or not you need to return ?		
7. Did you have privacy during consultation?		
8. Did you receive all the drugs that were prescribed?		
9. Did you understand the instructions from the Pharmacist/ Dispensary Technician?		
E SS I		

10. What was the attitude of the staff towards you?	Very good	Good	Poor
WJ SANE NO			

11.	Very	Clean	Dirty
What do you think of the cleanliness of the hospital and the surroundings?	Clean		

QUESTION	YES	NO
12.		
Have you attended the facility in an emergency (including night) during the last six		
months?		
13. If Yes: Were you seen promptly?		

14. Overall, how satisfied were you with your visit today?	Very	Satisfied	Dissatisfied
	Satisfied		
N. 12			

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## APPENDIX:1B

# MONITORING CHECKLIST

QUESTION	YES	NO
1. Is the general appearance of staff satisfactory?		
2. Is the staff punctual to work?		
3. Is attendance book in place?		
4. Is a duty roster in place?		
5. Is the duty roster adhered to?		
6. Are ward reports available?		
9. Are Health Education talks given?		

10. If yes,	Daily	Weekly	Occasionally

QUESTION	YES	NO
11. Are staff meetings/durbars held regularly?		
12. Generally, are infection prevention measures practised?		
KNUSI		



## **APPENDIX 1C:**

## COMPARISON OF PARAMETERS, 2010, 2011

PARAMETER	2010	2011
Anaemia case fatality	0	6.4
Ward Death Rate	1.8	2.3
Pneumonia	4.1	4.2
Diarrhoea	20.5	21.2
Stroke	6.5	9.1
Pneumonia(Adult)	7.3	7.4
Diabetic ketoacidosis(DKA)	30	11
Case fatality rate-Malaria	3.95	1.2
Surgical ward death rate	5	0
Hernioraphy	10	0
Post operative complications	14.9	8.6

Source; Records and IT Department, District Health Directorate

## COMPARISON OF OPD INTERVIEWS, 2010 AND 2011

PARAMATER	2010	2011
Did the doctor examine you?	95	96
Did you receive privacy during consultation?	94	94
Did you receive all drugs prescribed?	86	88
Staff attitude	30	62
Overall satisfaction	38	48
Seen in less than 2 hours	60	12
Were you told what was wrong with you?	76	50
Were you told to return?	58	64
Did you understand all pharmacy instructions?	90	100

Source; Records and IT Department, District Health Directorate

<b>COMPARISON OF OA</b>	MONITORING, 2010 AND 2011

PARAMETERS	2011	2010 (%)
	(%)	
Is the general appearance of staff satisfactory?	100	90
Is the staff punctual to work?	44	60
Is attendance book in place?	15	14
Is a duty roster in place?	100	86
Is the duty roster adhered to?	47	50
Are ward reports available?	100	100
Are staff meetings/durbars held regularly?	89	76
Generally, are infection prevention measures practised	75	45
Are Health Education talks given to you?	69	56

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Source; Records and IT Department, District Health Directorate

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## **APPENDIX 2**

## PROBLEMS IDENTIFIED AND ACTION TO BE TAKEN

SURVEYS	PROBLEM IDENTIFIED	ACTION TAKEN	
OPD EXIT	1) Unnecessary Delay:	<ul> <li>Need additional medical officer</li> </ul>	
		<ul><li>OPD talks to explain hospital</li></ul>	
	2) Not told of Diagnosis	-procedures	
		Prescribers should be encouraged to	
		always tell clients about their	
	3) Not given any instructions	diagnosis	
	about their illness	12	
		Prescribers and consulting room nurses	
		should be encourage to always giving	
	SEN 1	instruction about their conditions	
	Toole I	Sold Participation of the second seco	
INPATIENT(QA	1) Bath rooms and wards not	Refurbish and upgrading the wash	
MONITORING)	clean	rooms	
	E 22	Ensure constant cleaning of the wards.	
	The state		
	2) Poor knowledge of their	> Nurses are encouraged to inform	
	health issues	patients about their health.	
PROFESSIONAL	1) Maternal Death	Organize refresher course for midwives on	
INDICATORS		safe management of labour and post partum	
		hemorrhage.	
	2) Caesarean infection rate	Request for additional Doctor	
	3) Anaemia Fatality rate (Child		
	Health)		

#### **APPENDIX 3:**

#### **GLOSSARY OF COMMON TERMS**

Access: The extent to which users can reach and obtain service

Adverse incidence: An occurance that deviates from the normal, such as accidents occuring in the course of duty at the workplace

**Amenities**: The physical features of a service that facilitate the delivery and use of the service **Anaemia:** A medical condition in which there is a deficiency in red cell or heaemoglobin in the blood resulting in pallor and weariness.

**Caesarean section:** A surgical operation for delivering a baby by cutting through the mother's abdomen

**Client:** user of a product or service. Clients may be internal that is among the providers themselves or external, that is outside the providers

Clinical Audit: A systematic process whereby clinicians critically examine their practice against agreed standards and modify their practice where indicated, in order to improve the delivery and outcomes of patient care.

**Communication:** A process by which a message is passed from a sender to a receiver. The components of effective communication are the sender, the message, the receiver and feedback from the receiver to the sender.

**Confidentiality:** Protection of information from persons who are not expected to have access to it.

**Continuity of services:** Ability of the client to receive the complete package of services that he needs from the service provision system over time, without interruption or cessation.

**Customer:** Used interchageably with the client.

Effectiveness: The ability of a process to produce the anticipated desirable effects.

Efficiency: Carrying out an activity or process with the least waste of time, effort and resources

Equity: Fairness in distribution of services

Evaluation: Assessment of the outcome of a set of processes in relation to the set objectives.

**Expectation:** What is seen as being satisfactory

Guideline: Direction on how an activity may be carried out.

**Impact:** The lasting effects of an activity or set of activities.

Indicator: A yardstick used to measure the level of quality.

**Input:** A set of people and things that are needed to carry out an activity.

Interpersonal relationship: Relationship between users and providers and among providers.

**Monitoring:** Continuing assessment of the progress made in the implementation of a plan or activity, with the recommendations for modification of methods or as appropriate.

**Mortality meeting:** A meeting of health staff to examine deaths that have occurred in the facility over a period of time.

Outcome: The ultimate effect of an activity or set of activities

Output: The immediate result of an activity

**Perception:** Expression of what is being experienced

Perspective: Approch or point of view

Privacy: The state of not being seen or heard by a person not expected to do so.

Problem: The gap between present level and expected level of quality

Process: The actual performance of an activity or set of activities

Protocol: Strict direction on how to perform an activity

**Quality:** The degree to which a product or service meets the expectations of an individual or a group.

**Diabetic Ketoacidosis:** A medical condition where uncontrolled diabetes leads to accumulation of toxins in the body leading to coma and eventually death

Hernioraphy: A surgical process of removing hernia from the testicles of male patients

**Cerebrovascular Accident:** A sudden disabling attack or loss of consciousness caused by interruption of blood supply to the brain



## **APPENDIX 4:**

KNUST

#### **Calculation of Indicators from Patient Questionnaire**

#### **INDICATOR 1: Proportion of patients seen promptly.**

Number of patients saying they were seen in 2 hours or lessx 100

Number of patients interviewed

#### **INDICATOR 2: Proportion of patients seen without an unnecessary delay**

Number of patients saying they were seen without a delayx 100

Number of patients interviewed

INDICATOR 3: Proportion of patients examined by the Doctor/ Medical Assistant (MA)

Number of patients examined by the MAx 100

Number of patients interviewed

**INDICATOR 4: Proportion of patients told the diagnosis.** 

Number of patients told diagnosis x 100

Number of patients interviewed

#### **INDICATOR 5:** Proportion of patients given instructions about their illness from the MA.

Number of patients given instructions by the MA x 100

Number of patients interviewed

**INDICATOR 6:** Proportion of patients told whether to return.

Number of patients told whether or not to return x 100

Number of patients interviewed

#### INDICATOR 7: Proportion of patients having privacy during consultation

Number of patients having privacy during consultation x 100 Number of patients interviewed

INDICATOR 8: Proportion of patients receiving all drugs

The number of patients interviewed who received all drugs x 100

Number of patients interviewed

INDICATOR 9: Proportion of patients understanding instructions from the Pharmacist Number of patients who understood pharmacy instructions x 100 Number of patients interviewed

INDICATOR 10: Proportion of patients perceiving staff attitude to be very good

Number of patients saying staff attitude is very good x 100

Number of patients interviewed

**INDICATOR 11:** Proportion of patients perceiving clinic to be clean.

Number of patients saying clinic is very clean x 100

Number of patients interviewed

## **INDICATOR 12:** Proportion of those seeking emergency treatment inprevious 6 months who were seen

#### Promptly

Number of patients saying they were seen promptly during emergency x 100

Number of patients who answered question 12.

## INDICATOR 13. Proportion of patients feeling very satisfied with their visit.

W SAN

Number of patients saying they were very satisfied x 100

Number of patients interviewed