SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCES
UNIVERSITY OF GHANA

TOPIC:

CLIENT PERCEPTION OF QUALITY OF HEALTH CARE IN BAWKU WEST DISTRICT OF THE UPPER EAST REGION OF THE REPUBLIC OF GHANA

BY

FELIX DOE

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

AUGUST, 2009
DECLARATION

I declare that this dissertation is the result of my own research work. Where my work is indebted to the work of others, I have made acknowledgement.

I also declare that this work has neither been accepted in substance for the award of any other degree nor is it concurrently being submitted for any other degree.

Student

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

FELIX DOE

ACADEMIC SUPERVISORS:

Primary supervisor

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

DR. REUBEN ESENA

Secondary supervisor

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

DR. KOFI AHMED
DEDICATION

This work is dedicated to my wife Theodocia Doe whose support and prayers helped me through this work.
ACKNOWLEDGEMENT

I am very grateful to the Almighty God for seeing me through the entire MPH course.

I am also grateful to my academic supervisors Dr. Reuben Esena and Dr. Kofi Ahmed for guiding me through this work.

I would like to thank my field supervisor Mrs. Mary Stella Adapesa and all the members of the Bawku West District Health Management Team especially the public health nurse Mrs. Cecilia Azabu, the District Disease Control Officer Mr. James Ayamga, the Health Information Officer Mr. Hamid Bawa and for their support.

My gratitude also goes to Dr. Koku Awoonor Williams the Upper East Regional Director of Health Services, Mr. Lucio Dery the Deputy Director Administration, Dr. Patrick Atobra the Medical Superintendent of Zebilla Hospital, Mr. Edward Addai the Administrator of Zebilla Hospital, Mrs. Victoria Afibia the Nurse Manager of Zebilla Hospital, Mrs. Vera Anafo the Medical Assistant of Binaba Health Centre and Mrs. Margaret Purayire the midwife in-charge of Tilli clinic for the special assistance they offered me.

I also want to express my appreciation to my research assistants Mr. Godwin Emmideme, Jerry Abemem Akooba and Francis Ayindago and my data entry clerk Gabriel Ganyo Doe for their hard work.

I am also grateful to my friends and classmates for their support.
Finally my gratitude goes to Worawora Hospital and WHO Alliance for Health Policy Systems Research (AHPSR) for financial support.
ABSTRACT

As calls are made by health professional groups and clients for a more client-centered health care system, it becomes essential to define and measure patient perceptions of health care quality and to understand more fully what drives those perceptions.

The aim of this study is to describe client perceived quality of health care and satisfaction with care in selected public health facilities in Bawku West District.

The study was a cross-sectional survey conducted in three health facilities in Bawku West District to describe the quality of health care from the clients’ perspective. It was undertaken over a period of three months, from June to August 2009. Exit interviews were carried out for 265 clients aged 15 years and above who reported to the general OPD, antenatal clinic and postnatal clinics. The caretakers of clients who were less than 15 years were also interviewed. Both quantitative and qualitative methods of data collection were employed. Descriptive analysis and logistic regression were done using Epi Info 6 Version 3.4.1.

The results indicate that perception of quality of care and client satisfaction were high in all the three facilities. Mean score for quality of care was highest for the health centre (3.24) followed by the clinic (3.20) and then the hospital (3.15). Mean satisfaction score also follows the same
trend with the health centre recording 3.16, the clinic 3.15 and the hospital 3.08. Quality of care in the hospital was positively associated with adequacy medicines prescribed (p < 0.05) and the most significant predictors of client satisfaction are examining the client (p < 0.05), adequacy of medicines prescribed (p < 0.005), cleanliness of the facility (p < 0.05), privacy during consultation (p < 0.05) and quality of care (p < 0.0001). Most significant predictor of client satisfaction in the health centre is respect for clients (p < 0.05).

It is concluded that perception of quality of care and satisfaction are very high in all the facilities. Nonetheless there are gaps in communication with the client, provider/client relationship and availability of medicines that need to be addressed.

It is recommended that the facilities improve on communication with clients, provider/client relationship and availability of medicines.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Content</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration</td>
<td>ii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>iv</td>
</tr>
<tr>
<td>Abstract</td>
<td>v</td>
</tr>
<tr>
<td>List of tables</td>
<td>xi</td>
</tr>
<tr>
<td>List of figures</td>
<td>xiii</td>
</tr>
<tr>
<td>List of abbreviations</td>
<td>xiv</td>
</tr>
<tr>
<td>Definition of terms</td>
<td>xv</td>
</tr>
<tr>
<td>Table 14 Logistic regression of clinic provider and service characteristics (multivariate analysis)</td>
<td>xiii</td>
</tr>
<tr>
<td>(multivariate analysis)</td>
<td>48</td>
</tr>
</tbody>
</table>

## CHAPTER ONE

### INTRODUCTION

1.1 Background 1

1.2 Statement of the problem 3

1.3 Justification 4

1.4 Objectives

1.41 General Objective 5

1.42 Specific Objectives 5

1.5 Conceptual framework 5

## CHAPTER TWO

7
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>Introduction</td>
<td>7</td>
</tr>
<tr>
<td>2.1</td>
<td>Definition of quality of health care</td>
<td>7</td>
</tr>
<tr>
<td>2.2</td>
<td>Concept of Patient Satisfaction</td>
<td>8</td>
</tr>
<tr>
<td>2.3</td>
<td>Measurement of client satisfaction</td>
<td>9</td>
</tr>
<tr>
<td>2.4</td>
<td>Dimensions for describing quality of health care</td>
<td>11</td>
</tr>
<tr>
<td>2.5</td>
<td>Patients satisfaction as quality indicator</td>
<td>14</td>
</tr>
<tr>
<td>2.6</td>
<td>Comparison between Quality and Satisfaction</td>
<td>15</td>
</tr>
<tr>
<td>2.7</td>
<td>Predictors of client satisfaction</td>
<td>16</td>
</tr>
<tr>
<td>3.0</td>
<td>METHODOLOGY</td>
<td>20</td>
</tr>
<tr>
<td>3.1</td>
<td>Study design</td>
<td>20</td>
</tr>
<tr>
<td>3.2</td>
<td>Study location</td>
<td>20</td>
</tr>
<tr>
<td>3.3</td>
<td>Study population</td>
<td>21</td>
</tr>
<tr>
<td>3.4</td>
<td>Study variables</td>
<td>21</td>
</tr>
<tr>
<td>3.5</td>
<td>Sample size calculation</td>
<td>22</td>
</tr>
<tr>
<td>3.6</td>
<td>Sampling method</td>
<td>23</td>
</tr>
<tr>
<td>3.7</td>
<td>Data collection methods</td>
<td>23</td>
</tr>
<tr>
<td>3.8</td>
<td>Data processing and analysis</td>
<td>24</td>
</tr>
<tr>
<td>3.9</td>
<td>Quality control</td>
<td>26</td>
</tr>
<tr>
<td>3.10</td>
<td>Ethical considerations</td>
<td>26</td>
</tr>
<tr>
<td>3.11</td>
<td>Study limitation</td>
<td>27</td>
</tr>
<tr>
<td>4.0</td>
<td>RESULTS</td>
<td>28</td>
</tr>
<tr>
<td>4.1</td>
<td>Introduction</td>
<td>28</td>
</tr>
</tbody>
</table>
4.1 Background characteristics of the respondents ..............................................................
4.3 Assessment of quality dimensions (provider characteristics) ........................................
  4.31 Empathy .................................................................................................................
  4.32 Communication .........................................................................................................
  4.33 Competence ............................................................................................................... 
  4.34 Availability of medicines ..........................................................................................
  4.35 Tangibles ...................................................................................................................
  4.36 Responsiveness .........................................................................................................
  4.4 Overall rating of quality of care and client satisfaction .............................................. 
  4.5 Multivariate logistic regression analysis ......................................................................

CHAPTER FIVE .....................................................................................................................

DISCUSSIONS ......................................................................................................................

  5.0 Introduction .................................................................................................................
  5.1 Background characteristics of the respondents ........................................................
  5.2 Other patient characteristics. ...................................................................................
    5.21 Empathy .................................................................................................................
    5.22 Communication ......................................................................................................
    5.23 Competence ...........................................................................................................
    5.24 Availability of medicines ....................................................................................... 
    5.25 Tangibles ............................................................................................................... 
    5.26 Responsiveness ......................................................................................................
  5.3 Overall quality of care ............................................................................................... 
  5.4 Overall satisfaction .....................................................................................................

CHAPTER SIX .....................................................................................................................

CONCLUSIONS AND RECOMMENDATIONS .....................................................................
6.1 Conclusions .......................................................................................................................................... 56
6.2 Recommendations ................................................................................................................................ 57


APPENDICES ................................................................................................................................................. 61

Appendix 1: Consent form .......................................................................................................................... 61
Appendix 2: Structured questionnaire .......................................................................................................... 62
Appendix 3: Focus group discussion guide ................................................................................................. 68
LIST OF TABLES

Content...........................................................................................................................................page

Table 1  Background of the clients.................................................................................................30

Table 2  Other characteristics of the clients..................................................................................32

Table 3  Empathy of the health staff by facilities type.................................................................33

Table 4  Communication between clients and staff by facility type...........................................35

Table 5  Competence of the health staff in the health facilities.....................................................36

Table 6  Availability of medicines in the health facilities...............................................................37

Table 7  Tangibles in the health facilities......................................................................................38

Table 8  Clients’ assessment of responsiveness in the health facilities.........................................39

Table 9  Overall rating of care and satisfaction in the health facilities.........................................41

Table 10  Mean scores for quality of care and client satisfaction...............................................42

Table 11  Logistic regression of hospital provider and service characteristics

            (multivariate analysis)...........................................................................................................43

Table 12  Logistic regression of factors that influence the perception of quality of care
and satisfaction with care in the hospital .......................................................... 46

Table 13  Logistic regression of health centre provider, service characteristics and
client satisfaction (multivariate analysis) .......................................................... 47

Table 14  Logistic regression of clinic provider and service characteristics
(multivariate analysis) .......................................................................................... 48
LIST OF FIGURES

Figure 1. Conceptual framework ................................................................. 6
LIST OF ABBREVIATIONS

WHO – World Health Organization

MOH – Ministry Of Health

GHS – Ghana Health Service

QA – Quality Assurance

POW – Program Of Work

ICD – Institutional Care Division

DHMT – District Health Management Team

QI – Quality Improvement

JCAHO – Joint Commission on Accreditation of Health care Organizations

OPD – Out Patients’ Department

FGD – Focus Group Discussion

NHIA – Nation Health Insurance Authority
ANC – Antenatal Clinic

PNC- Post natal Clinic

NHIS – National Health Insurance Scheme

AHPSR – Alliance for Health Policy Systems Research.

**DEFINITION OF TERMS**

1. **Empathy** – caring and individualised attention provided to clients.

2. **Communication** – giving information to the clients about their health condition and treatment

3. **Availability** – availability of all the essential medicines in the health facilities

4. **Tangibles** – physical facilities, equipment and appearance of personnel.

5. **Responsiveness** – how the health care providers treat the clients to meet their legitimate non-health expectations. Willingness of the providers to help clients and provide prompt service

6. **Unit visited** – the unit or department in the health facility where the client was treated.

7. **Type of visit** – whether the client’s visit is an initial or follow up visit

8. **Client** – patients who assess care in the health facilities

9. **Provider** – health staff
CHAPTER ONE

INTRODUCTION

1.1 Background

Measuring client or patient satisfaction has become an integral part of health facility management strategies across the globe (Smith and Engolbracht, 2001). The success of a health facility depends on client perceptions of health care quality because of the impact it has on client satisfaction. Satisfaction of clients not only ensures compliance with treatment and instructions about their illness, but also influences utilization of health facilities.

Turhal and others (2002) made a comment that “in the last 20 years the old way of treating patients in the "disease centered" approach has changed to "patient centered" style. Now patients have more influence toward the care they receive and they are given opportunity to change the way care is delivered to them”

Health care in Ghana has over the years been characterized by poor provider-client relationship which has made clients and some health providers to raise serious concerns. Provision of high quality client-centered care is therefore one of the greatest challenges of the MOH and the GHS. As a result of the concerns raised by clients and health providers, the issue of improving quality of health care attracted serious attention in 1989 during the Regional Directors’ conference. Subsequent to the conference, improving the quality of health care attracted attention of both policy makers and health care professional groups and efforts have been made to identify key issues for improving the quality of health care throughout the country.
MOH (1996) in its Medium-term Health Strategy for 1997-2001 and its operational document the Health Sector 5-year Programme of Work (5-Year POW), identified improving the quality of health care as one of its five strategic objectives. The program identified taking care of the needs of clients and improving health worker performance as the main areas to consider. QA program was identified as the main strategy to use.

Ghana Health Service in an effort to improve on the quality of health care in the country started the implementation of the (QA) program in 1994. The program started as a pilot program in the Eastern Region in 1994 and later extended to all the other regions. It focuses on client-centered care. One of the main indicators of the program has been the measurement of client satisfaction as an indicator of perceived quality of care.

The QA program started in the upper East region in 2002. QA teams were formed mainly in the hospitals to monitor QA activities. One of the functions of the QA teams is to conduct client satisfaction surveys and use the data collected to improve quality of care. In the Bawku West District, the district hospital has a QA team that has been conducting client satisfaction surveys once a year, not at least twice a year as recommended by the institutional care division of the GHS, the division responsible for clinical care. There is no QA team at the district level or facility level responsible for conducting surveys in the sub district health facilities. Hence client satisfaction surveys are not conducted in the health centres and the clinics to describe the quality of health care and the level of client satisfaction with service delivery with the view of identifying service areas that need to be improved to meet the expectations of clients.
1.2 Statement of the problem

Health facilities at all levels of care are required to provide quality health care that meets the expectations of their clients. This is however, not so throughout the country. Provider-client relationship has been very poor resulting in growing concern among clients about the quality of care. The MOH (2007) in its national health policy document identifies complaints from users about the abusive and humiliating treatment by the health providers and shortages of equipment, consumables supplies and some essential drugs as some of the challenges of the health services. The national health policy document reveals that some health facilities are efficient, delivering high quality services and being responsive to the needs of their clients, but many are not.

To monitor and improve the quality of care in the health facilities, the ICD of the GHS recommends client satisfaction surveys by health facilities at least twice in a year. Even though, the District hospital in Bawku West has conducted some client satisfaction surveys, annual reports show that it has not been able to do it twice a year. It is therefore not known how sustainable quality improvement efforts have been throughout the year. The health centres and clinics in the District have not been conducting client satisfaction surveys. The level of quality of care is therefore not known in these facilities.
1.3 Justification

Client satisfaction data is an important tool for quality improvement.

This study describes client perception and satisfaction with health care as a means of measuring quality of health care in Bawku West District. In addition to evaluating client perception and satisfaction with services, it also elicits which service areas are priorities for improvement. It will also help bridge the gap between clients’ expectations and the actual service they receive. Seeking clients’ opinions of the current level of service will ensure client focus in service delivery. This is necessary in ensuring high level of quality of service delivery.

This study will also help the health facilities to initiate policies and programs that can lead to improved client-provider relationship which will result in increased utilization and revenue generation. It will also serve as a baseline study, since no such study describing the quality of care across the various levels of care has been done in the District.
1.4 Objectives

1.41 General Objective
The general objective of this study is to describe client perceived quality of health care and satisfaction with care in selected public health facilities in Bawku West District.

1.42 Specific Objectives
The specific objectives are:

1. To describe and compare the perceived quality of care at the various levels of care in the District
2. To determine the level of client satisfaction with health care in the health facilities
3. To identify the predictors of perception of quality of care and client satisfaction in the health facilities

1.5 Conceptual framework
The relationship between the independent variables namely patient characteristics and provider characteristics and the dependent variables perceived quality of care and client satisfaction is presented in Figure 1 below.

There are two main factors that influence the perceived quality of care. These are the expectations of clients and the experience of actual care they receive. Clients’ expectations are influenced by their characteristics which include age, sex, marital status, educational level, occupation, health insurance status. The care they experience is influenced by health provider characteristics such as empathy, communication, competence, availability, tangibles and responsiveness. The perceived quality of care then determines their level of satisfaction with care.
Figure 1 Conceptual framework

**Client characteristics**
- Age
- Sex
- Level of education
- Occupation
- Marital status
- Health insurance status
- Type of visit
- Unit visited
- Number of visits

**Provider and service characteristics**
- Empathy
- Communication
- Competence
- Availability
- Tangibles
- Responsiveness

The clients’ expectations about health care quality

The clients’ experience of health care quality (previous and current)

**Client Perceived quality of care**

**Client satisfaction with care**

Adapted from (Penergan et al, 2000)
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

The use of patients' opinions in assessments of quality of health services has gained greater prominence over the past 25 years (Sitzia and Wood, 1997). This is usually done through the use of Patient satisfaction surveys which assess the non-technical aspects of quality of care. Integrating patients’ opinions into service provision enables health care providers meet the expectations of the clients leading to higher satisfaction and subsequent compliance with instructions and treatment. Patient satisfaction has therefore become critical objective in the strategic planning process of health facilities.

2.1 Definition of quality of health care

Quality of health care has been defined by experts in various ways. Donabedian (1990), one of the qualities of health care experts defines it as “that kind of care which is expected to maximize an inclusive measure of patient welfare, after one has taken account of the balance of expected gains and losses that attend the process of care in all its parts” (Donabedian, 1990). In his view, quality involves three distinct factors: structure, process and outcomes. Structure refers to the amenities of the organization providing the care. Process refers to the professional activities associated with providing care and outcome relates to health status improvements and patient satisfaction with care.
Patient satisfaction is also defined as ‘a health care recipient’s reaction to salient aspects of the context, process and result of their process experience’ (Pascoe, 1983). Geities and others (1993) define it in terms of two dimensions – technical and experiential. The technical dimensions are associated with the skills and techniques of the healthcare providers and the effectiveness of the care they provide. The experiential aspect deals with the subjective perspective of quality based on a patient’s experiences with care.

2.2 Concept of Patient Satisfaction

There is a great deal of variability and confusion in how quality is conceptualized and operationalized and no universal or all-inclusive definition or model of quality exists (Sower et al, 2001). Sower and others argue that quality is recognized as a multidimensional concept. Statistical techniques such as factor analysis have been promoted as providing evidence that satisfaction is a multidimensional concept (Abramowitz et al 1987).

Logically, conceptual and theoretical issues should come before measurement but the opposite has been the case with patient satisfaction research (Sitzia and wood, 1997). Linder Pelz (1982) studied theories on attitudes and beliefs and found that the relationship between expectations that something will happen and whether they occur or not determine attitudes. On job satisfaction the author found three theoretical formulations that could be used in understanding patient satisfaction. The first is the discrepancy theory, which says that satisfaction is the perceived or relative discrepancy between what an individual desires and what they receive. The second theory, fulfillment theory, is similar to the first. However what is important is the absolute
difference between what is desired and what is received not the relative difference. Finally, equity theory holds that satisfaction is perceived equity, or perceived balance of inputs and outputs.

2.3 Measurement of client satisfaction

Consumer satisfaction studies are challenged by the lack of a universally accepted definition or measure (Sitzia and Wood, 1997)

The absence of a solid conceptual basis and consistent measurement tool for consumer satisfaction has led to the proliferation of surveys that focus exclusively on patient experience in the past 10 years. i.e. aspects of the care experienced such as waiting times, the quality of basic amenities, and communication with health-care providers, all of which help identify tangible priorities for quality improvement.

Research relating global satisfaction ratings with patient experience has revealed strong associations between the two (Young et al, 2000). Yet, to what extent patient experience explains satisfaction with the health-care system remains unclear. The literature suggests that much of the remaining variation in health system satisfaction after adjusting for factors commonly used to measure the concept is a reflection of patient experience (Benson et al, 1995).

Bleich et al (2009) however disagree and hypothesized that patient experience accounts for only a small fraction of the unexplained variation in health system satisfaction, even after adjustments for the demographic, health and institutional factors.
Surveying patient satisfaction is the most common method for obtaining patients’ views on their hospital stay. Many theories include patients’ expectations as the basic concept of satisfaction (Brown and Schwartz 1989). Logically, we have to know what patients expect before we ask them about their satisfaction with the care they received. Consequently, the involvement of patients in the development of an instrument to measure satisfaction is very important and must be an integral part of development (Vuori, 1991).

Despite the growing literature devoted to the concept of patient satisfaction, no unified approach has been devised for its meaning and its measurement (Williams 1994). Some authors have criticized the notion that patient satisfaction is directly supported by the discrepancies between expectations and perception (Williams 1994).

One factor that can account for variation in patient perceptions of hospital care is differences in the measures of satisfaction. The patient satisfaction surveys developed by the Picker Institute focus on “experience of care” and take a problem-oriented approach, asking questions about what did or did not happen during the hospitalization with regard to various aspects of care (Cleary, et al., 1991). Other satisfaction surveys take a ‘satisfaction with care’ approach, asking the individual to rate their satisfaction with various aspects of care while they were hospitalized (Finkelstein, et al., 1998;). These two approaches to assessing patients’ views of their hospital experiences may reflect the two complementary but sometimes conflicting goals for developing such information: quality improvement by hospitals and public reporting for use by consumers. To help hospitals direct their quality improvement efforts, specific questions identifying problem areas have been used (Cleary, et al., 1991; Hargraves, et al., 2001).
2.4 Dimensions for describing quality of health care

Output performance measures provide information on how well a program is doing in terms of the types and amounts of services provided. Within this broader spectrum lie various dimensions of quality that constitute service quality. To implement and use quality measures to evaluate performance, one must select those quality dimensions to be used and then relate the dimensions to specific characteristics of the program (Stern and Caro, 2004).

Diversity arises when examining what is meant by quality in medical care. Medical quality consists of a mixture of technical elements such as correct diagnosis, appropriate interventions and effective treatments as well as elements such as good communications, patient satisfaction and consideration for patient preferences (Gill M., 1993). It is not sufficient to consider only the technical competence of those providing care. Rather, a high quality service is one that provides effective care and is delivered humanely and efficiently.

Ovretveit J. (1990) argues that: "Professional quality has two parts: (1) whether the service meets the professionally assessed needs of its clients; and (2) whether the service correctly selects and carries out the techniques and procedures which professionals believe meet the needs of clients".
Brown and others (1989) describe nine quality dimensions of health service delivery: effectiveness, efficiency, technical competence, interpersonal relations, and access to service, safety, continuity and physical aspects of health care.

Risser (1975) in a study on patient satisfaction reported that four components emerged: the cost; the convenience; the provider's personal qualities and the nature of the interpersonal relationship; and finally the provider's professional competence and the perceived quality of care received. Eight dimensions were reported in a review by Ware and others (1983). These are interpersonal manner-features, technical quality of care-competence, accessibility/convenience-factors involved in arranging to receive medical care, finances-factors involved in paying for medical services, efficacy/outcomes of care (the results of services provided), continuity of care-constancy in provider or location of care, physical environment-features of setting in which care is delivered and availability-presence of medical care resources.

However, as many satisfaction studies are conducted in very specific contexts it is understandable that any standard classification never seems entirely appropriate. In a thorough review of studies of patient satisfaction with hospital patient care, Rubin (1990) listed the following as important components: nursing care, medical care, communication, ward management, ward environment, and discharge procedure.

context, McLver (1991) proposed accessibility, waiting times, waiting environment, attitude of staff, and patient information as critical components. Parasuraman and others (1988) came out with five dimensions that have been practically tested and fitted into their SERVQUAL instrument. These are responsiveness, assurance, tangibles, reliability and empathy. Ford et al (1997) proposed service specific dimensions to be added to the five SERVQUAL dimensions to completely address the patients’ definition of quality in the health care industry. The Joint commission on accreditation of health care organizations (JCAHO) developed nine quality dimensions. They are efficiency, appropriateness, efficacy, respect and caring, safety, continuity, effectiveness, timeliness and availability (Sower et al, 2001) Using focus groups consisting of patients, administrators and physicians, Jun and others (1998) identified 11 dimensions of health care quality. Eight of these dimensions, tangibles (physical environment, cleanliness), reliability, responsiveness, competence, courtesy, communication, access and understanding the customer, are parts of the Parsuraman model. Bowers (1994) added caring (personal, human involvement) and patient outcomes (relief from pain, saving of life, or anger/disappointment with life after medical intervention). Another dimension, collaboration, was discussed by all of Jun’s groups. Collaboration, he maintains, encompasses the concepts of teamwork and the synergistic effect of various actors in providing health care. Mittal and Baldasare (1996) measured the effect of certain quality factors in a physician’s practice, and found that physician competence, communication, respect, caring, taking time to learn history, and follow up treatment were weighted more heavily if the patients were not satisfied. The condition of the office environment and waiting time, received lower weighting scores. Rees (1998) in The Consumer Health Information Source Book maintains that satisfaction with hospital care is too often assessed on the basis of amenities that have little relationship to the
clinical quality of care. He feels that amenities do not indicate the quality of what happens to people while they are in the hospital and what happens to them after discharge. He recommends the measures of: respect for patient values, preferences and needs; coordination of care that is scheduling tests and procedures; information and education provided; physical comfort (waiting time after call bell sounded); emotional support and alleviation of fear and anxiety; opportunity for involvement of family and friends; provision for continuity and transition to the home environment.

Seihoﬀ (1998) documented continuity of care and caring behaviors in evaluating the use of unlicensed assistive personnel vis-a-vis patient satisfaction. Seihoﬀ developed a reliable and valid instrument to determine the predictors of patients’ ratings of quality of hospital care. He measured satisfaction at two separate points during the hospital stay. Significant predictors of quality ratings included: information concerning ones’ illness (communication) and perceptions of the staff work environment (tangibles). In a study of emergency department nursing care, researchers found that psychological safety (related to caring/compassion) and information giving (related to communication) contributed signiﬁcantly to patient satisfaction with nursing care and to the patients’ intention to return to the emergency department.

2.5 Patients satisfaction as quality indicator

Consumers of health care services play a variety of roles in health care quality assessment and monitoring. By expressing their preferences, they supply the valuations needed to choose among alternative strategies of care Donabedian (1987). They help define the meaning of quality in the technical sense. Moreover, their preferences are the paramount
consideration in defining the quality of the interpersonal process and of the amenities of care. Consumers are also valuable sources of information in judging the quality of care. Some data, mainly, about non-technical aspects of care are most easily obtained from consumers. Most importantly, consumers can and do, through expressing satisfaction or dissatisfaction, pass a judgment about many aspects of the process of care and its outcomes. Consumers, if properly informed, could help to regulate the quality of care by means of their choices. Health care is now entering an age of "accountable consumerism" in which patients demand service excellence. Some studies view patients' expectations as probabilities, judgments about the likelihood that a set of events will occur (Conway T., Willcocks S., 1997). Others view expectations as values-patients' desires about care are expressed as perceived needs, wants, importance, standards, or entitlements (Kravitz, 1996). These expectations may pertain to health care in general or to a specific health care encounter such as a clinic visit or hospitalization. Whether patient expectations are considered as probabilities or values, an understanding of patient expectations is important because meeting these expectations may lead to greater satisfaction with care. The measure of patient satisfaction is viewed as important in outcomes research and quality improvement efforts (Maxwell 2001).

2.6 Comparison between Quality and Satisfaction

Although different, satisfaction and service quality relate closely. Parasuraman (1988) suggests that service quality is similar in nature to an attitude. It is related, but not equivalent, to satisfaction. Cronin and Taylor, (1992) ask whether a provider's objective should be to have
consumers who are merely “satisfied” or who consider the experience of their encounter as one which has achieved maximum levels of quality. They suggest that service quality perceptions should be considered as long-term consumer attitudes and satisfaction should be referred to as short-term, encounter-specific consumer judgements.

The literature indicates a positive relationship between service quality and patient satisfaction with hospital care and a willingness to return to the hospital, or even to recommend it to family or friends (Strasser, 1991). According to Oswald (1998) consumers cannot evaluate medical treatment per se, but must rely on attitudes toward caregivers and the facility itself in order to evaluate their experience. He maintains that there is a strong connection between health service quality perceptions and customer satisfaction.

2.7 Predictors of client satisfaction

A study by Barr and Banks (2002) found that studies about the association between patient characteristics and client satisfaction have found that several variables were significantly related to satisfaction, mainly patient age and health status. Most of the studies found these two characteristics to be strongly related to hospital satisfaction. This finding is supported by studies done in different countries (Thi et al, 2002). In general, older patients tended to report greater satisfaction, and sicker patients tended to be more critical (Hargraves et al, 2001). Other patient characteristics which significantly relate to hospital patient satisfaction include: gender (Hargraves et al, 2001), educational level (Hargraves et al, 2001), insurance status (Finkelstein et al, 1998), and past experience with care received (John, 1992).
Oljira and Gebre-selassie (2001) in their study done in Ethiopia found that satisfaction level of outpatient service users was 57.1%. It was 74% in Trinidad and Tobago (Singl et al. 1999), 55% in Mozambique (Newman et al., 1998), 68% in Bangladesh (Aldana et al. 2001). They also found that increasing satisfaction was also associated with getting the prescribed medication. Increase in age was associated with increased satisfaction score but show an inverse relation with educational level. High educational status was associated with low satisfaction score. A study in Trinidad and Tobago showed that satisfaction decreases with higher educational level but increased with increasing age. Decreased waiting time was associated with increased satisfaction (Singl et al., 1999).

Oljira and Gebre-selassie did not find any association between payment scheme and gender.

Abdosh (2006) found that short waiting time for being seen by a health provider is associated with high satisfaction scores. The level of satisfaction is also related to the payment status as paying patients are less satisfied than non-paying patients with the overall quality of the service. Abdosh thought that this may be related to the fact that their expectation of the service may raise when they incur certain costs to the service. Abdosh did not observe any relationship between level of satisfaction and age, educational status.

In a study done by Aldana (2001) individual variables such as sex, marital status, level of education, number of children, and occupation did not have a significant influence. Also individual variables such as length of consultation time, ensuring privacy when needed, physical examination, information on the health problem, and advice given by the service provider, all of these were positively associated with the satisfaction of users, whereas the length of waiting time was negatively associated. Aldana concluded that, assuming that client satisfaction with the
overall services provided is a function of the level of satisfaction for each of the variables assessed, multivariate analysis did demonstrate that satisfaction with the politeness of the provider was the most powerful predictor variable, followed by satisfaction with the provider’s respect for privacy, waiting time, and consultation time.

Bodur and others (2002) found that married people were more satisfied with the waiting time. People having a low educational level were found to be satisfied with the adequacy of the equipment. Additionally, older people were significantly satisfied about the adequacy of the equipment and the attitude of nurses.

According to study done by Bekele (2008) age, marital status, and type of health facility were found to be statistically significant in determining respondents' mean score satisfaction to health care providers' characteristics. In their study, respondents who utilized services at health centers were more likely to be highly satisfied with the outcome variables as compared to the respondents from hospitals and the respondents’ age, marital status, level of education, and type of health facility were statistically significant in determining respondents' mean score satisfaction to cleanliness of the facilities.

A study by Tsai and others revealed that patient satisfaction with the physical environment of outpatient waiting areas was associated with gender, age and visiting frequency.

The study determined that women were less satisfied with the cleanliness of the physical environments, and that older patients were more satisfied with several dimensions of the physical environment. In addition, first-time outpatients registered less favorable perceptions than returning outpatients in comfort of the waiting area.
Turhal and others (2002) in their study found that responses were not influenced by the diagnosis, age, sex or educational status. Sex, age, educational levels, and marital status were not significant variables for the prediction of overall satisfaction.

Another antecedent of patient satisfaction examined by previous studies is waiting time. Boudreaux and O’Hea (2004) found that perceived waiting time is a strong predictor of patient satisfaction.
CHAPTER THREE

METHODOLOGY

3.1 Study design

The study is a cross sectional descriptive study using both quantitative and qualitative methods of data collection.

3.2 Study location

The Bawku West District lies within the Upper East the Region of Ghana. It was carved out of the old Bawku District in 1988. The District shares boundaries with Burkina Faso in the north, Bawku Municipal in the East, Talensi Nabdam District in the west and East Mamprusi District in the in the south. It covers an approximate area of 1,070 square kilometers which constitute about 12% of the total land area of the Upper East Region. The demographic characteristics are similar to the prevailing characteristics of predominantly rural Districts. These include large household sizes, high illiteracy rate that is about 80% with high birth and fertility rate. The district has eleven major health facilities; one hospital, three health centres, five public clinics and two private clinics. The staff strength of the entire District is 78. This include one medical officer, three medical assistants, thirty-five staff nurses, thirteen midwives and one pharmacist (Bawku West DHMT, 2007).
3.3 Study population

The study population was the general OPD, ANC and PNC users of public health facilities in the Bawku West District who are aged 15 years and above and the caregivers of users below 15 years within the period of the study (June to August 2009).

Inclusion criteria:

All users aged 15 years and above and caretakers of users below 15 years who attended the general OPD, antenatal clinic and post natal clinic in the selected health facilities and who were not admitted or referred were qualified to be included in the study.

3.4 Study variables

The dependent variables of the study were quality of care and client satisfaction.

The independent variables were background variables, unit visited, health insurance status, type of visit, number of visits, empathy, communication, competence, availability of medicines, tangibles and responsiveness.
3.5 Sample size calculation

Client satisfaction with the care received as an outcome measure was used to determine the sample size. Sample size was calculated using the formula

\[
\text{Sample Size} = \frac{n}{1 + \left(\frac{n}{\text{population size}}\right)}
\]

In which \( n = Z \cdot Z \cdot \frac{P(1-P)}{D^2}\), \( P \) = true proportion of factor in the population, or the expected frequency value, \( D \) = maximum difference between the sample mean and the population mean and \( Z \) = area under normal curve corresponding to the desired confidence level

Using population size of 3081, 77% level of satisfaction from a similar study done in Ethiopia by Bekele (2008), 5% margin of error at 95% confidence level, the sample size was calculated to be:

\[
N = \frac{1.96 \cdot 1.96 \cdot 0.77(1-0.77)}{(0.05 \cdot 0.05)} = 272.138944
\]

Sample size = \( \frac{272.138944}{1 + \left(\frac{272.138944}{3081}\right)} = 250 \)

The actual number of clients interviewed was 265. The number of clients selected from each health facility was based on proportional attendance of the health facilities: hospital (192), health centre (53) and clinic (20)
3.6 Sampling method

The hospital was purposively selected because it is the only hospital in the district. Lottery method was used to select one out of the three health centres and one out of the five clinics.

The names of all the health centres and the clinics were written on pieces of paper and put in separate containers. One health centre and one clinic were randomly selected from the containers.

All users who qualify by the inclusion criteria and have consented to participate in the study were interviewed.

3.7 Data collection methods

Both quantitative and qualitative methods were employed in data collection. Quantitative data was collected using structured questionnaire. The questionnaire for the study was a 43-item questionnaire, comprising 9 segments—namely, the client’s background characteristics, other characteristics such as unit visited, health insurance status, type of visit and the number of visits. It also comprised of 6 dimensions of quality of care and overall rating of care. The questionnaire
used was adapted from WHO and GHS questionnaires (WHO, 2002) and GHS (2004). Corrections were made on ambiguous questions after pre-testing and focus group discussions. The questionnaire sought information about the background of the clients, the quality of care they received, how they would rate the care they received, their level of satisfaction with the care they received and whether they would recommend the health facilities to their friends and relatives. Some of the questions required a yes or no answer. Others required clients to rate the dimensions of quality and satisfaction on 4-point Likert scale. The response scale ranked from poor to very good for the dimensions of quality and not satisfied to very satisfied for satisfaction. The questionnaires were administered through face to face interview by trained assistants. Clients who received outpatient, antenatal and postnatal services and were ready to leave the health facility were interviewed.

Qualitative data was collected through focus group discussions. Three FGDs were held; one in each community in which each health facility is situated. The FGDs were held in the local language for both men and women. Each group consisted of 8 clients who were conveniently selected. The discussions were moderated by a trained assistant. Each discussion lasted for about one hour. All the discussions were translated into English and transcribed verbatim.

3.8 Data processing and analysis

Data cleaning was manually done by identifying incomplete, incorrect and inaccurate parts of the data and modifying or deleting these parts. Double data entry was done using Epi Info 6 version 3.4.1. The two data sets were compared and discrepancies traced to the questionnaire for
correction. Data were analyzed using descriptive analysis of frequencies and cross-tabulations. Background characteristics were analyzed using frequencies while the perceived quality of care and level of satisfaction by facility type were analyzed using cross tabulations. In the analysis, clients were grouped into three age groups 15 – 34 years, 35 – 59 years and above 60 years. Quality of care rating of poor and fair were classified as poor, good and very good classified as good. Satisfaction rating was classified into not satisfied (not satisfied and somewhat satisfied) and satisfied (satisfied and very satisfied). Satisfaction and quality of care were also rated from 1 – 4 with 1 being the lowest and 4 the highest. Students and unemployed were classified as unemployed.

Logistic regression was employed to determine the level of significance and association between the background characteristics and other characteristics such as the unit visited, health insurance status, type of visit and the number of visits and the dimensions of quality. Logistic regression was also used to determine the level of significance and association between the independent variables under background and other characteristics and the dependent variables namely the overall rating of the quality of care and the level of satisfaction. The variables that had p-value of <0.05 were considered significant. Conclusions were drawn based on the strength and the direction of the association between the independent and the dependent variables.

FGDs were translated into English and transcribed verbatim. Transcriptions were coded for key comments reflecting the quality of care, satisfaction and dissatisfaction. Clients’ comments regarding barriers to services, and suggestions for improvement were highlighted.
3.9 Quality control

Field assistants were thoroughly trained for two days. The principal investigator closely monitored the assistants during the data collection to ensure that the data was collected from the clients. Administered questionnaires were checked daily for accuracy and completeness.

The data was cleaned to ensure quality.

3.10 Ethical considerations

Ethical clearance was obtained from the GHS Ethical Review Committee for the study. Permission was sought from the Upper East Regional Director of health Services, the Bawku West District Director of Health Service, the Medical Superintendent of the Zebilla hospital and the heads of the health centre and the clinic before the study was conducted. Informed consent was obtained from all the clients either signed or thumbprinted the consent form before interviews. Safety of the data was assured by keeping the questionnaires and recordings under key and lock. Confidentiality was assured by not entering the names of the clients into the Epi
Info software. Privacy was assured by not asking sensitive questions. The data was used strictly for the purpose of this research. This study did not pose any risk to the clients. It does not provide direct benefits to the clients. But it will help to improve the quality of health care in the district to the benefit of the residents of the entire district and beyond.

3.11 Study limitation

The major limitations of the study were

1. Interviews and FGDs were held on the health facility premises. This might cause clients to have the tendency to give higher ratings for fear of victimization even though they were assured of confidentiality.

2. Interviewing caretakers of patients less than 15 years of age rather than the patients themselves might not give the true picture since their views may be different from that of the patients themselves.

3. The principal investigator did not take active part in the focus group discussions due to language barrier.

4. Only one health centre and one clinic were sampled due to resource constraints.
CHAPTER FOUR

RESULTS

4.0 Introduction

This chapter presents the results of the study on background and other characteristics of the clients. The clients’ assessment of the individual dimensions of care (provider characteristics) by type of provider, the overall quality of care and overall satisfaction with care. The chapter also shows associations between client and provider characteristics, association between provider characteristics and overall perceived quality of care, and association between overall quality of care and overall satisfaction.

4.1 Background characteristics of the respondents

Background characteristics of the clients namely age, sex, marital status, educational attainment, religious affiliation and occupation are shown in Table 1.

A total of 265 users were interviewed. The age of the clients ranges between 15 and 74 years. Out of the 192 clients interviewed in the hospital, 29.7% were between the ages of 15 – 24 years, 30.2% were between 25 – 34 years, 19.3% were between 35 – 44 years, 14.6% between 45 – 59 years and 6.3% between 60 – 80 years. In the health centre, 32.1% of the clients were the ages of
15 – 24 years, 43.4% between the ages of 25 – 34 years, 13.2% between the ages of 35 – 44 years, 5.7% between the ages of 45 – 59 years and 5.7% between above 60 years. About 20% of the clients in the clinic are between the ages of 15 – 24 years, 45% between the ages of 25 -34 years, 30% between the ages of 35 – 44 years, and 5% between above 60 years. In the hospital, about 66.1% of the clients were females and 33.9% were males. In the health centre, 66% were females and 34% were males. In the clinic, 65% were females and 35% were males.

Majority of the clients in the hospital (71.9%) were married, 19.3% were single, and 8.9% divorced. About sixty-four percent of the health centre clients were married, 30.2% were single, 1.9% were widowed and 3.8% divorced. In the clinic, 80% of the clients were married, 15% single, and 5% divorced. A little more than half of the hospital clients (56.6%) had no formal education, about 22.9% of them had primary education, 16.1% had secondary education and 4.2% had tertiary education. Among the health centre clients, 56.6% had no formal education, 9.4% had primary education, 30.2% had secondary education and 3.8% had tertiary education. Sixty-five percent of the clinic clients had no formal education, 20% had primary education and 15% had secondary education. Majority of the hospital clients (43.8%) were Christians, 35.4% were Muslim and 20.8% were traditionalists. In the health centre, the majority of the clients (45.3%) were traditionalists, while 35.8% and 18.9% were Christians and Muslims respectively. In the clinic, the majority of the clients (40%) were Muslims, 35% were Christians and 25% were traditionalists. Close to half of the hospital clients (45.3%) were farmers, 27.6% were self-employed, 15.1% were students, 8.3% were unemployed and 3.6% were public servants. For the health centre, 34% of the clients were farmers, 22.6% were self employed, 18.9 were students, 17% were unemployed and 7.5 were public servants. For the clinic, 70% were farmers, 10% were students, 10% were unemployed and 10% were self employed.
### Table 1 Background of the clients

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Hospital Number (%)</th>
<th>Health Centre Number (%)</th>
<th>Clinic Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 - 24</td>
<td>57 (29.7)</td>
<td>17 (32.1)</td>
<td>4 (20)</td>
</tr>
<tr>
<td>25 - 34</td>
<td>58 (30.2)</td>
<td>23 (43.4)</td>
<td>9 (45)</td>
</tr>
<tr>
<td>35 – 44</td>
<td>37 (19.3)</td>
<td>7 (13.2)</td>
<td>6 (30)</td>
</tr>
<tr>
<td>45 – 59</td>
<td>28 (14.6)</td>
<td>3 (5.7)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>60 – 80</td>
<td>12 (6.3)</td>
<td>3 (5.7)</td>
<td>1 (5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192 (100)</td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>65 (33.9)</td>
<td>18 (34)</td>
<td>7 (35)</td>
</tr>
<tr>
<td>Female</td>
<td>127 (66.1)</td>
<td>35 (66)</td>
<td>13 (65)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192 (100)</td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>138 (71.9)</td>
<td>34 (64.2)</td>
<td>16 (80)</td>
</tr>
<tr>
<td>Single</td>
<td>37 (19.3)</td>
<td>16 (30.2)</td>
<td>3 (15)</td>
</tr>
<tr>
<td>Divorced</td>
<td>0 (0)</td>
<td>1 (1.9)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Widowed</td>
<td>17 (8.9)</td>
<td>2 (3.8)</td>
<td>1 (5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192 (100)</td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
<tr>
<td><strong>Educational level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal schooling</td>
<td>109 (56.8)</td>
<td>30 (56.6)</td>
<td>13 (65)</td>
</tr>
<tr>
<td>Primary</td>
<td>44 (22.9)</td>
<td>5 (9.4)</td>
<td>4 (20)</td>
</tr>
<tr>
<td>Secondary</td>
<td>31 (16.1)</td>
<td>16 (30.2)</td>
<td>3 (15)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>8 (4.2)</td>
<td>2 (3.8)</td>
<td>0 (0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192 (100)</td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muslim</td>
<td>68 (35.4)</td>
<td>10 (18.9)</td>
<td>8 (40)</td>
</tr>
<tr>
<td>Christian</td>
<td>84 (43.8)</td>
<td>19 (35.8)</td>
<td>7 (35)</td>
</tr>
<tr>
<td>Traditionalist</td>
<td>40 (20.8)</td>
<td>24 (45.3)</td>
<td>5 (25)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>29 (15.1)</td>
<td>10 (18.9)</td>
<td>2 (10)</td>
</tr>
</tbody>
</table>
Unemployed | 16 (8.3) | 9 (17) | 2 (10)
Farmer | 87 (45.3) | 18 (34) | 14 (70)
Self employed | 53 (27.6) | 12 (22.6) | 2 (10)
Government employee | 7 (3.6) | 4 (7.5) | 0 (0)
Student | | | |
Total | 192 (100) | 53 (100) | 20 (100)

4.2 Other patient characteristics

More than three quarters of the hospital clients (78.6%) visited the OPD while those who visited the antenatal and post natal clinics constitute 18.2% and 3.1% respectively (Table 2). For the health centre, 71.7% of the clients were OPD clients while 13.2% and 15.1% were antenatal and postnatal clients respectively. About 60% of the clinic clients were OPD clients while 5% and 35% were antenatal and post natal clients respectively. The majority of the clients (89.1%) from the hospital were registered with the NHIS while 10.9% of them did not have health insurance. Out of the 53 clients who visited the health centre, 45 (84.5%) were registered with the NHIS while 15.1% were not registered. All (100%) of the clinic clients were registered with the NHIS.
Table 2 Other characteristics of the clients

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Hospital Number (%)</th>
<th>Health Centre Number (%)</th>
<th>Clinic Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit visited</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General OPD</td>
<td>151 (78.6)</td>
<td>38 (7.1)</td>
<td>12 (60)</td>
</tr>
<tr>
<td>Antenatal clinic</td>
<td>35 (18.2)</td>
<td>7 (13.2)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Post natal clinic</td>
<td>6 (3.1)</td>
<td>8 (15.1)</td>
<td>7 (35)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192 (100)</td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
<tr>
<td><strong>Health insurance status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insured</td>
<td>171 (89.1)</td>
<td>45 (84.5)</td>
<td>20 (100)</td>
</tr>
<tr>
<td>Non-insured</td>
<td>21 (10.9)</td>
<td>8 (15.1)</td>
<td>0 (0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192 (100)</td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
<tr>
<td><strong>Type of visit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial visit</td>
<td>51 (26.6)</td>
<td>18 (34)</td>
<td>7 (35)</td>
</tr>
<tr>
<td>Follow up visit</td>
<td>141 (73.4)</td>
<td>35 (66)</td>
<td>13 (65)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192 (100)</td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
<tr>
<td><strong>Number of visits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once</td>
<td>48 (25)</td>
<td>17 (32.1)</td>
<td>6 (30)</td>
</tr>
<tr>
<td>Twice</td>
<td>40 (20.8)</td>
<td>10 (18.9)</td>
<td>2 (10)</td>
</tr>
<tr>
<td>Three times</td>
<td>39 (20.3)</td>
<td>10 (18.9)</td>
<td>4 (20)</td>
</tr>
<tr>
<td>More than three times</td>
<td>65 (33.9)</td>
<td>16 (30.2)</td>
<td>8 (40)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>192 (100)</td>
<td>53 (100)</td>
<td>20 (100)</td>
</tr>
</tbody>
</table>
4.3 Assessment of quality dimensions (provider characteristics)

The Provider characteristics were classified into empathy, communication, competence, availability of medicines, tangibles and responsiveness.

4.3.1 Empathy

In the clinic all the clients indicated that the staff were ready to listen to their problems, compared to 98.1% for the health centre and 93.8% for the hospital. All of the clinic clients indicated that the staff were caring as against 98.1% and 92.7% for the health centre and the hospital respectively (Table 3).

Table 3 Empathy of the health staff by facilities type

<table>
<thead>
<tr>
<th>Empathy indicators</th>
<th>Number of clients with positive assessment by facility type n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital N=192</td>
</tr>
<tr>
<td>Readiness of staff to listen to</td>
<td>180 (93.8)</td>
</tr>
</tbody>
</table>
4.32 Communication

The communication between the staff and the clients on their illness, treatment and the medicines prescribed was also assessed by the clients and the results are presented in Table 4. Seventy percent of the clients from the clinic indicated that they were told their diagnosis as compared to 64.6% for the hospital and (64.2%) for the health centre. Treatment was explained to (66.1%) of the hospital clients as against 65.0% for the clinic clients and 49.1% for the health centre. Among the clients who attended the hospital and the health centre, 65.1% and 65.0% respectively said they were given information about other types of treatment for their conditions compared to 60.8% for the clinic. Instructions were given to 85% of the clinic clients about their illness while 83.3% and 79.2% of the hospital and health centre clients respectively were given instructions about their illness.
Table 4 Communication between clients and staff by facility type.

<table>
<thead>
<tr>
<th>Communication indicators</th>
<th>Number of clients with positive Assessment by facility type (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital N=192</td>
</tr>
<tr>
<td>Provider telling client the diagnosis</td>
<td>124 (64.6)</td>
</tr>
<tr>
<td>Provider explaining treatment to the client</td>
<td>127 (66.1)</td>
</tr>
<tr>
<td>Provider giving information to clients about other types of treatment</td>
<td>125 (65.1)</td>
</tr>
<tr>
<td>Giving instructions to the client about his/her illness</td>
<td>160 (83.3)</td>
</tr>
<tr>
<td>Clarity of information given to clients</td>
<td>184 (95.8)</td>
</tr>
<tr>
<td>The client understanding instructions about the medicines</td>
<td>187 (98.9)</td>
</tr>
</tbody>
</table>

4.33 Competence
The perceived competence of the provider was measured as by examination of the client and perceived adequacy of the skills of the provider. The results are shown in Table 5.

The entire health centre and the clinic clients said they were examined while 96.4% of the clients from the hospital indicated they were examined. The entire health centre and the clinic clients perceived that the skills of the provider were adequate as against 96.9% of the hospital clients.

This finding agrees with the responses from the FGDs. Participants were of the view that, providers are allowed to practice because they have adequate skills to do so. A participant said ‘if they don’t have the skills, they will not be there’.

Table 5 Competence of the health staff in the health facilities

<table>
<thead>
<tr>
<th>Competence indicators</th>
<th>Number of clients with positive Assessment by facility type (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital N=192</td>
</tr>
<tr>
<td>Provider examining the client</td>
<td>185 (96.4)</td>
</tr>
<tr>
<td>Adequacy of the provider’s skill</td>
<td>186 (96.9)</td>
</tr>
</tbody>
</table>
4.34 Availability of medicines

The ability of the health facilities to supply all the prescribed essential medicines to the clients was crucial. This was indicated by the clients during the FGDs.

The findings of the assessment of the availability of medicines are presented in Table 6.

All the 20 clients of the clinic who received prescriptions for medicines got all the medicines in the clinic. Of the clients who attended the hospital and the health centre, 92.1% and 96.2% got the medicines respectively. Out of the 18 clients who did not get all the medicines in the hospital, 12(80%) of them did not get all because of lack of it in the hospital while 1(50%) of the clients who did not get the medicines in the health centre did not get all because of lack of it in the health centre. All the clients from the clinic were of the view that the medicines supplied were adequate for their treatment as compared to 94.7% and 98.1% of the hospital and health centre clients respectively.

Table 6 Availability of medicines in the health facilities

<table>
<thead>
<tr>
<th>Availability of indicators</th>
<th>Number of clients with positive Assessment by facility type (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital N=192</td>
</tr>
<tr>
<td>Provider prescribing medicines for the client</td>
<td>189 (98.4)</td>
</tr>
<tr>
<td>Clients who got all the</td>
<td>174 (92.1)</td>
</tr>
</tbody>
</table>
4.35 Tangibles

Table 7 shows the assessment of the cleanliness of the facility environment, the neatness of the staff, adequacy of the provider’s equipment and the comfort of the waiting area of the facilities.

Table 7 Tangibles in the health facilities

<table>
<thead>
<tr>
<th>Tangible indicators</th>
<th>Number of clients with positive assessment by facility type n(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital N=192</td>
</tr>
<tr>
<td>Cleanliness of the facility</td>
<td>176 (91.7)</td>
</tr>
<tr>
<td>Neatness of the staff</td>
<td>187 (97.4)</td>
</tr>
<tr>
<td>Adequacy of equipment</td>
<td>176 (91.7)</td>
</tr>
<tr>
<td>Comfort of the waiting area</td>
<td>160 (83.3)</td>
</tr>
</tbody>
</table>

Ninety-five percent of clients rated the cleanliness of the clinic as good (Table 7). Ninety-one percent of the hospital clients said it was good and 79% of the health centre clients said it was
good. To 91.7% of the hospital clients the provider’s equipment were adequate while in the clinic and the health centre, 90% and 84.9% respectively thought so.

4.36 Responsiveness

Table 8 shows the clients’ assessment of responsiveness

Table 8 Clients’ assessment of responsiveness in the health facilities

<table>
<thead>
<tr>
<th>Responsiveness indicators</th>
<th>Number of clients with positive assessment by facility type (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital N=192</td>
</tr>
<tr>
<td>Waiting time</td>
<td>129 (67.2)</td>
</tr>
<tr>
<td>Respectfulness of staff</td>
<td>185 (96.4)</td>
</tr>
<tr>
<td>Privacy during consultation</td>
<td>175 (91.1)</td>
</tr>
<tr>
<td>Privacy during examination</td>
<td>175 (91.1)</td>
</tr>
<tr>
<td>Time given for clients to ask questions</td>
<td>153 (79.7)</td>
</tr>
<tr>
<td>Involving clients in decision making</td>
<td>121 (63.0)</td>
</tr>
<tr>
<td>Confidentiality</td>
<td>174 (90.6)</td>
</tr>
<tr>
<td>Clients who felt they were treated badly because of age</td>
<td>8 (4.2)</td>
</tr>
<tr>
<td>Clients who felt they were treated badly because of their sex</td>
<td>9 (4.7)</td>
</tr>
<tr>
<td>Clients who felt they were treated badly because of lack of money</td>
<td>11 (5.7)</td>
</tr>
<tr>
<td>Clients who felt they were treated badly because of social class</td>
<td>14 (7.3)</td>
</tr>
<tr>
<td>Clients who felt they were treated badly because of type of illness</td>
<td>16 (8.3)</td>
</tr>
</tbody>
</table>

The waiting area of the clinic was rated as good by all of the clients while 90.6% and 83.3% of the clients from the health centre and hospital respectively rated it as good.

The time the clients spent before seeing the prescriber was rated as good by 95% of the clients from the clinic compared with 73% of the clients from the health centre and 67.2% from the hospital who rated it as good. At the hospital, 79.7% of the clients were given enough time to ask questions about their health problems or treatment as compared to 75.5% for the health centre and (65.0%) for the clinic. Sixty-five percent of the clients from the clinic said they were involved in making decisions about their health care or treatment while 63% of those who attended the hospital were involved in making decision about their treatment and only 45.3% of those who attended the health centre were involved in making decision about their treatment. All the clinic clients felt their personal information was kept confidential while 96.2% of those from the health centre and 90.6% of the hospital clients felt so.

About four percent and 5% of the clients from the hospital felt they were treated badly because of their age and sex respectively. Out of the 9 clients who felt they were treated badly because of their sex 3(33.3%) were males while 66.7% were females. In all the health facilities, clients felt they were treated badly because of their poverty and social class. In the hospital, health centre
and the clinic, 5.7%, 3.8% and 5.0% felt they were treated badly because of their poverty respectively while 7.3%, 3.8% and 10% felt they were treated badly because of their social class in the hospital health centre and clinic respectively. Only in the hospital (8.3%) and the health centre (1.9%) that clients felt they were treated badly because of the type of illness they had.

4.4 Overall rating of quality of care and client satisfaction

The overall rating of the quality of care and satisfaction was quite high for all the health facilities. All of the clients who attended the clinic said the quality of care was either good or very good and all of them were either satisfied or very satisfied with the care they received while 98.1% perceived the quality to be either good or very good in the health centre and 93.2% in the hospital. There was 100% satisfaction with care in the health centre and 98% in the hospital (Table 9).

Table 9 Overall rating of quality of care and satisfaction in the health facilities

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hospital</th>
<th>Health centre</th>
<th>Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=192</td>
<td>N=53</td>
<td>N=20</td>
</tr>
<tr>
<td>Quality of care</td>
<td>181 (94.3)</td>
<td>52 (98.1)</td>
<td>20 (100.0)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>179 (93.2)</td>
<td>50 (94.3)</td>
<td>20 (100.0)</td>
</tr>
<tr>
<td>Recommend facility to friends and relatives</td>
<td>189 (98.4)</td>
<td>53 (100.0)</td>
<td>20 (100.0)</td>
</tr>
</tbody>
</table>
All (100%) of both the clinic and health centre clients said they would recommend the facilities to their friends and relatives while 98.4% of the hospital clients said they would do so.

The mean scores for both quality of care and client satisfaction shown in Table 10 were highest for the health centre followed by the clinic and the hospital.

Table 10 Mean scores for quality of care and client satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hospital</td>
</tr>
<tr>
<td>Quality of care</td>
<td>3.15</td>
</tr>
<tr>
<td>Client satisfaction</td>
<td>3.08</td>
</tr>
</tbody>
</table>

4.5 Multivariate logistic regression analysis

The result of multiple regression to determine the association between client characteristics and provider characteristics shown in (Table 11) is as follows:
Table 11 Logistic regression of Hospital provider and service characteristics (multivariate analysis)

<table>
<thead>
<tr>
<th>Patient characteristic</th>
<th>Readiness of staff to listen to clients</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds ratio</td>
<td>95% C.I.</td>
<td>p-value</td>
</tr>
<tr>
<td>ANC/PNC visit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-insured</td>
<td>19.0752</td>
<td>1.5582, 233.5224</td>
<td>0.0211</td>
</tr>
<tr>
<td></td>
<td>0.0670</td>
<td>0.0098, 0.4577</td>
<td>0.0058</td>
</tr>
<tr>
<td>Telling clients about their diagnosis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANC/PNC visit</td>
<td>7.9969</td>
<td>1.9816, 32.2729</td>
<td>0.0035</td>
</tr>
<tr>
<td>Explaining treatment to clients</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attained at least primary education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANC/PNC visit</td>
<td>3.2212</td>
<td>1.4206, 7.3042</td>
<td>0.0051</td>
</tr>
<tr>
<td></td>
<td>4.2670</td>
<td>1.2967, 14.0406</td>
<td>0.0170</td>
</tr>
<tr>
<td>Comfort of the waiting area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gainfully employed</td>
<td>4.0879</td>
<td>1.2958, 12.8961</td>
<td>0.0163</td>
</tr>
<tr>
<td>Privacy during physical examination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-insured</td>
<td>0.1599</td>
<td>0.0302, 0.8453</td>
<td>0.0309</td>
</tr>
<tr>
<td>Giving clients adequate time to ask questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANC/PNC visit</td>
<td>14.0204</td>
<td>1.7105, 114.9225</td>
<td>0.0139</td>
</tr>
<tr>
<td>Informing clients about other types of treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Positive associations found in the hospital are:

- Readiness of the hospital staff to listen to the problems of the clients was positively associated with unit visited and health insurance status. Clients who visited ANC/PNC clinics and clients who were registered with the NHIS were about 8% and 9% respectively more likely to perceive that the staff were ready to listen to their problems.

- Telling clients about their diagnosis was positively associated with the unit visited. ANC/PNC clients were 7 times more likely to be told about their diagnosis than general OPD clients.

- Explaining the treatment to clients was positively associated with higher educational level and visiting ANC/PNC. Clients who have at least primary education and clients who visit the ANC/PNC are 3 and 4 times respectively more likely have their treatment explain to them than clients who have no formal education.
comfort of the waiting area was positively associated to employment. Clients who are
gainfully employed are 4 times more likely to be satisfied with the comfort of the waiting
area than unemployed clients.

There is also an association between clients getting enough time to ask questions and
unit visited. ANC/PNC clients are 14 times more likely to have enough time to ask
questions than general OPD clients.

Getting information about other types of treatment is positively associated with having at
least primary education and visiting ANC/PNC. Clients who have at least primary
education and ANC/PNC clients are 2 times more likely to be informed about other types
of treatment than clients have no formal education and ANC/PNC clients are 4 times
more likely to be informed about other types of treatment than general OPD clients.

Quality of care is significantly associated with adequacy of medicines prescribed.

Client satisfaction is significantly associated with examining the client, adequacy of
medicines prescribed and quality of care

Negative associations are:

Privacy was negatively associated with not registering with NHIS. Non-insured clients
are about 84% less likely to be satisfied with privacy than insured clients.

Getting information about other types of treatment is negatively associated with older
age. Older clients are about 83% less likely to be informed about other types of treatment
than younger clients.
• Involving clients in making decision about their health care or treatment is negatively associated older age. Older clients are 85% less likely to be involved in making decision about their health care or treatment than younger clients.

In the health centre, client satisfaction is significantly associated with respect for clients.

The results of multiple regression of provider characteristics that influence perception of overall quality of care and overall satisfaction are shown in Table 12.

Table 12 Logistic regression of factors that influence perception of quality of care and satisfaction with care in the hospital

<table>
<thead>
<tr>
<th>Variable</th>
<th>Perception of Quality of care</th>
<th>Odds ratio</th>
<th>95% C.I.</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow up visit</td>
<td></td>
<td>17.6526</td>
<td>1.3527, 230.3710</td>
<td>0.0285</td>
</tr>
<tr>
<td>Adequate drugs prescribed</td>
<td></td>
<td>7.3753</td>
<td>1.2602, 43.1649</td>
<td>0.0267</td>
</tr>
<tr>
<td>Client satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination of client</td>
<td></td>
<td>30.3674</td>
<td>1.4885, 619.5197</td>
<td>0.0265</td>
</tr>
<tr>
<td>Adequate drugs prescribed</td>
<td></td>
<td>54.5146</td>
<td>4.1418, 717.5169</td>
<td>0.0024</td>
</tr>
<tr>
<td>Clean facility</td>
<td></td>
<td>11.7525</td>
<td>1.2872, 107.3020</td>
<td>0.0290</td>
</tr>
<tr>
<td>Privacy during consultation</td>
<td></td>
<td>19.5087</td>
<td>1.5332, 248.2398</td>
<td>0.0221</td>
</tr>
<tr>
<td>Perception of high quality of care</td>
<td></td>
<td>239.3469</td>
<td>18.6946, 3064.3535</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
Perception of quality of care is positively associated with follow up visit and perceived adequacy of drugs prescribed. Clients who come for follow up visit and clients who perceive that the drugs prescribed are adequate are 65% and 37% respectively more likely to rate quality of care high. This agrees with the findings from the FGD. A male participant said “I rate care as high quality when I get all the drugs prescribed. Another male participant said “I got all the drugs so the quality is high”.

Client satisfaction is positively associated with examining the client, perceived adequacy of drugs prescribed, clean facility, privacy during consultation and perceived high quality of care.

Table 13 Logistic regression of Health centre provider, service characteristics and client satisfaction (multivariate analysis).

<table>
<thead>
<tr>
<th>Patient characteristic</th>
<th>Telling clients about their diagnosis</th>
<th>95% C.I.</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds ratio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow up Visit</td>
<td>29.0500</td>
<td>1.8216, 463.2763</td>
<td>0.0171</td>
</tr>
<tr>
<td>Waiting time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gainfully employed</td>
<td>7.3565</td>
<td>1.7856, 30.3087</td>
<td>0.0057</td>
</tr>
<tr>
<td>Client satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client given respect</td>
<td>24.5000</td>
<td>1.0910, 550.1923</td>
<td>0.0439</td>
</tr>
</tbody>
</table>

In the health centre, client satisfaction is positively associated with giving clients respect. Clients who are respectfully talked to are twenty-four times more likely to be satisfied than clients who are not respectfully talked to.
Table 14 Logistic regression of clinic provider and service characteristics (multivariate analysis).

<table>
<thead>
<tr>
<th>Patient characteristic</th>
<th>Telling clients about their diagnosis</th>
<th>95% C.I.</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Odds ratio</strong></td>
<td><strong>95% C.I.</strong></td>
<td><strong>p-value</strong></td>
</tr>
<tr>
<td>Female client</td>
<td>30.0000</td>
<td>2.1899, 410.9845</td>
<td>0.0109</td>
</tr>
<tr>
<td>Two or more visits</td>
<td>65.0000</td>
<td>3.3768, 1251.1984</td>
<td>0.0057</td>
</tr>
<tr>
<td></td>
<td><strong>Clients getting enough time to ask questions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female client</td>
<td>72.0000</td>
<td>3.8066, 1361.8436</td>
<td>0.0044</td>
</tr>
<tr>
<td></td>
<td><strong>Informing clients about other types of treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female client</td>
<td>72.0000</td>
<td>3.8066, 1361.8436</td>
<td>0.0044</td>
</tr>
<tr>
<td></td>
<td><strong>Involving clients in making decisions about their care or treatment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female client</td>
<td>72.0000</td>
<td>3.8066, 1361.8436</td>
<td>0.0044</td>
</tr>
</tbody>
</table>

In the clinic, female clients are more likely to be:

1. told their diagnosis
2. given enough time to ask questions
3. informed about other types of treatment
4. involved in making decisions about their care or treatment.
CHAPTER FIVE

DISCUSSIONS

5.0 Introduction

This chapter, discusses the results of a study that described client perception of the quality of health care in selected public health facilities in Bawku West District and how these results relate to the findings of previous studies by other researchers.

The study is limited to the views of users of the health services in the selected health facilities. It describes the background characteristics, other characteristics of the clients and how these characteristics are related to the provider and service characteristics. It also presents the views of the clients in relation to the components of quality, the overall perception of the quality of care and satisfaction. The comparison of the perceived quality of care in the three health facilities has also been highlighted. The study has identified quality gaps that need to be filled in order to meet the expectations of the clients.

5.1 Background characteristics of the respondents

The descriptive analysis shows that the utilization of the health facilities is higher in the young clients between the ages of 15 – 34. Health providers are expected to pay equal attention to all age groups. The results however does not show this. It appears health providers in the hospital pay more attention to the younger age group than the older group. The results reveal that, the older age group among hospital clients is less likely to be informed about other types of
treatment (p < 0.05) and less likely to be involved in making decisions about their care and
treatment (p < 0.05). The facility users were predominantly women. The females far outweighed
the males because children were usually brought to the health facilities by their mothers. This is
in contrast to a study done in Ethiopia by Olijira and Gebre-selassie (2001). Female clients
attending the clinic are more likely to be satisfied with the time given to ask questions (p < 0.01).
Female clients are also more likely to be told about their diagnosis (p < 0.05), informed about
other types of treatment (p < 0.01) and involved in making decisions about their care and
treatment (p < 0.01). Males generally explore issues more deeply than females and are therefore
less likely to be satisfied with the available time to ask questions. This might also be as a result
of the health workers paying more attention to the female clients who were in the majority.

Majority of the clients were married. This finding is in line with the finding by Olijira and

Most of the clients were farmers. This is because, farming is the main economic activity in the
northern sector of the country. The findings also show that utilization among Christians was
higher than that of the Muslims and traditionalist. This could be explained by higher prevalence
of the use of herbal preparations among the Muslims and especially the traditionalists. The study
does not show association between religious affiliation and any of the quality dimensions.

Hospital clients who are gainfully employed are more likely to be satisfied with comfort of the
waiting area (p < 0.05) and privacy during consultation (p < 0.05). Health centre clients who are
gainfully employed are more likely to be satisfied with the waiting time (p < 0.01). This is so
because the unemployed are generally less satisfied with many things in life. Hospital clients
who have attained at least primary education were more likely to have their treatment explained
to them (p < 0.01) and more likely to be informed about other types of treatment (p < 0.05). This
perhaps is due to the fact that the educated are more enlightened and are more likely to ask about their diagnosis and treatment.

5.2 Other patient characteristics.

The general OPD attendance is much more than the antenatal and post natal clinics. This enables the midwives have more time to educate and counsel the clients. Thus antenatal and post natal clients of the hospital are more likely to perceive that the health staff were ready to listen to them (p < 0.05), more likely to be informed about other types of treatment (p < 0.05), more likely to be given enough time to ask questions (p < 0.05) more likely to be told about their diagnosis (p < 0.01) and more likely to have their treatments explained to them (p < 0.01). Uninsured clients who attended the hospital were less likely to be satisfied with the readiness of the health staff to listen to their problems (p < 0.01) and less likely to be satisfied with the privacy during examination (p < 0.05). There were numerous media reports about health providers discriminating against insured clients. This situation seems to have changed. Enrolment into the NHIS has increased considerably and health providers now seem not to be happy with the uninsured clients.

Clients who have visited the health facilities more than once and experienced good outcome of treatment would tend to believe that the quantity of medicines supplied is adequate. This perhaps explains the finding that clients who visited the health facilities more than once were 33% more likely to perceive that the medicines supplied were adequate (p < 0.001).
5.21 Empathy

Empathy measured as the readiness of the staff to listen to the clients and the caring of the staff was rated highest in the clinic (100%) followed by the health centre (98.1%). This perhaps is due to the high level of utilization of the hospital and the health centre which results in the staff spending less time with the clients giving the perception that they were less caring. This could also be explained by place of residence which also influences client perception. The clinic serves more rural clients than the health centre and the hospital and the health centre also serves more rural clients than the hospital. Rural clients may be more likely to rate the quality higher than urban clients.

5.22 Communication

Most of the ratings on communication were low. The ratings for the health centre were lowest. Two reasons may account for this finding. In the first place, health providers tend to believe that clients may not understand information about their conditions. Secondly, this may be due to high attendance at the health facilities and inadequate workforce resulting in the providers spending less time to communicate to clients than expected.
5.23 Competence

Competence was measured by examination of the client and adequacy of the provider’s skills. Both indicators were rated very high in all the facilities. The rating for the clinic and health centre was 100% for both indicators.

5.24 Availability of medicines

Availability of medicines was a bigger problem in the hospital than in the health centre. The clinic did not have any stock out of medicines. About 92.1% of the hospital clients and 96.2% of the health centre clients got the prescribed medicines. This is much higher than what was recorded in Jimma hospital (33%) by Oljira and Gebre-Selassie, (2001).

5.25 Tangibles

The tangibles were rated highest in the clinic except adequacy of equipment which was rated lower (90%) than the hospital (91.7%). The health centre tangibles were all rated lower than that of the hospital except comfort of the waiting area – (90.6%) for the health centre and (83.3%) for the hospital.
5.26 Responsiveness

Waiting time, time given for clients to ask questions, and involving clients in decision making were rated low in all health facilities except in the clinic where waiting time was rated as good by 95% of the respondents.

Significant percentage of respondents felt they were treated badly because of their age (4.2% for hospital), sex (4.7% for the hospital), lack of money (5.7% for the hospital, 3.8% for the health centre), social class (7.3% for the hospital, 3.8% for the health centre, 10% for the clinic) and type of illness (8.3% for the hospital, 1.9% for the health centre). This shows that there is perceived discrimination against certain clients in the health facilities.

5.3 Overall quality of care

For the hospital, adequacy of medicines prescribed has positive association with quality of care ($p < 0.05$). Mean score for overall quality of care was highest in the health centre followed by the clinic and then the hospital. Majority of the clients believe that the improvement in their conditions will be as a result of taking the medicines prescribed. Therefore their perception of quality of care is informed by the perception of adequacy of medicines they are given.
5.4 Overall satisfaction

The findings show that overall satisfaction was high in all the three facilities – 93.2%, 94.3% and 100% for the hospital, health centre and the clinic respectively. This percentages are higher than what was found in developing countries such as Ethiopia - 54.1% (Abdosh, 2006), Mozambique – 55% (Newman et al, 1998), Bangladesh – 68% (Aldana et al, 2001) and Trinidad and Tobago – 74% (Singh et al, 1999). Overall quality of care, adequacy of drugs prescribed and examining clients were the most significant predictors of satisfaction with care in the hospital. Satisfaction with care in the health centre is predicted by respect for clients. Mean satisfaction score was highest for the health centre followed by the clinic and then the hospital. This result is in line with the study conducted by Bekele et al (2008), which showed that clients who utilized services at health centers were more likely to be highly satisfied with the outcome variables as compared to the respondents from the hospital. The study found no association between satisfaction and any background characteristic of the client. In contrast to this finding some studies found significant association between overall satisfaction and age (Hargraves et al, 2001; Oljira and Gebre-Selassie, 2001), sex (Hargraves et al, 2001; Bekele et al, 2008), marital status (Bekele et al, 2008), and educational level (Oljira and Gebre-Selassie, 2001). These findings however agree with findings other studies found no association between satisfaction and age (Turhal et al, 2002), sex (Aldana et al, 2001), educational level(Turhal et al, 2002; Aldana et al, 2001; Abdosh, 2006). Boudreaux and O’hea (2001) found a strong negative association between satisfaction and waiting time contrary to this study.
CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

This study investigated the perception of clients about the quality of health care and client in selected health facilities Bawku West District. It can be concluded from the study that perceived quality of care and satisfaction were high in all the three facilities. Perceived quality of care was highest in the clinic (100%) followed by the health centre (98.1%) and then the hospital (94.3%). Overall satisfaction also followed similar trend – clinic (100%), health centre (94.3%) and hospital (93.2%).

Nonetheless there are aspects of care that need to be improved. The clients’ assessment of certain aspects of communication and responsiveness was low among all the health facilities especially the health centre. The hospital and the health centre experienced stock out of certain essential medicines. The waiting time was less acceptable to the clients of the hospital and the health centre.

Availability of all medicines prescribed in the facility, clients’ perception of discrimination against them due to of lack of money and comfort of the waiting area are the significant predictors of the perception of quality of care. The most significant predictors of satisfaction are overall perception of quality of care and cleanliness of the facility.
6.2 Recommendations

To the health facilities

1. All the health facilities should improve on communication with clients
   a) Clients should be informed about their diagnosis
   b) Prescribers should explain the treatment to the clients
   c) Prescribers should give information to the clients about other types of treatment for their conditions
   d) Clients should be given instructions about their illness
   e) Time should be given to clients to ask questions
   f) Clients should be involved in making decision about their treatment.

2. All the health facilities should improve on provider/client relationship to avoid the perception of being treated badly because of sex, lack of money and social class

3. The hospital and the health centre should endeavour to improve on availability of medicines.

4. The hospital and the health centre should also endeavour to reduce the waiting time

To the DHMT

The DHMT should assist the health centres and the clinics to conduct client satisfaction surveys in the future.
REFERENCES

17. Cronin J (1992). “ measuring service quality, a reexamination and extension” Journal of marketing 56 (3); 55-68


33. Kravitz RL(1996) Patients' Expectations for Medical Care: An Expanded Formulation Based on Review of the Literature. Medical Care Research and Review 53: 3-27


40. Oswald et al (1998) Quality Determinants and Hospital Satisfaction, Marketing Health Services, Spring, v18 n1: 19


APPENDICES

Appendix 1: Consent form
My name is ……………….. and I am part of a research team conducting a study into client perception of quality of health care in selected health facilities in this District. The findings of this survey will be used to improve the quality of health care in the District.

Your participation is completely voluntary and you can withdraw from the survey after having agreed to participate without any problem to you or your treatment. You are free to refuse to answer any question that is asked in the questionnaire. All your responses will remain strictly confidential: programme staff members will not have access to your responses. It will only be used for research purposes. Your name will not appear on your questionnaire, and your responses will not be linked to your identity at any time.

Signing this consent indicates that you understand what will be expected of you and are willing to participate in this survey.

If you have any questions about this survey you may ask me or contact Dr Felix Doe on telephone number 0245118342

If you agree to participate in this study, please provide your signature/thumb print below.

Signature: Thumb Print:

Date: Date:
Appendix 2: Structured questionnaire

CLIENT PERCEPTION OF QUALITY OF HEALTH CARE IN BAWKU WEST DISTRICT

Interview Date: __ / __ / __

District: __________________________

Facility type: 1. Hospital  2. Health centre  3. Clinic

Name of Interviewer: __________________________

Respondent’s Number: __ __ __

<table>
<thead>
<tr>
<th>NO</th>
<th>QUESTIONS</th>
<th>RESPONSES</th>
<th>SKIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>BACKGROUND OF RESPONDENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>Age of respondent.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>Sex</td>
<td>1. Male</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Female</td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>What is your marital status? (Please circle)</td>
<td>1. Married</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Single</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Divorced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Widowed</td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>What is your highest educational level?</td>
<td>1. No formal schooling</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Primary</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Secondary</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Tertiary</td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td>What is your religious affiliation?</td>
<td>1. Muslim</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Christian</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Traditionalist</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Other (specify)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>.........................</td>
<td></td>
</tr>
</tbody>
</table>
| Q6  | What is your occupation? | 1. Student  
2. Unemployed  
3. Farmer  
4. Self employed  
5. Government employee  
6. Non-government employee  
7. Other (specify) …………….. |
|-----|------------------------|--------------------------------------------------|
| Q7  | Unit visited           | 1. General OPD  
2. Antenatal clinic  
3. Post natal clinic  
4. Family planning clinic  
5. Eye clinic  
6. Dental clinic  
7. ART clinic  
8. Other(specify)………………….  
…. |
| Q8  | Do you have health insurance? | 1. Yes  
2. No |
| Q9  | Is your visit an initial visit or follow up visit? | 1. Initial visit  
2. Follow up visit |
| Q10 | About how many times have you visited this hospital/health centre/clinic in the past six months? | 1. Once  
2. Twice  
3. Three times  
4. More than three times |

**EMPATHY**

| Q11 | How will you rate the readiness of the staff to listen to your problems | 1. Poor  
2. Fair  
3. Good  
4. Very good |
|-----|------------------------------------------------------------------------|--------------------------------------------------|
| Q12 | How will you rate how the staff cared about you as a client? | 1. Poor  
2. Fair  
3. Good  
4. Very good |

**COMMUNICATION**

| Q13 | Did the health care provider tell you what was wrong with you? | 1. Yes  
2. No |
|-----|----------------------------------------------------------------|--------------------------------------------------|
| Q14 | Did the health care provider explain your treatment to you? | 1. Yes  
2. No |
| Q15 | Did the health care provider give you instructions about your illness? | 1. Yes  
2. No |
| Q16 | For your [child’s] visit, how would you rate the experience of how clearly health care providers explained things to you? | 1. Poor  
2. Fair  
3. Good  
4. Very good |
| Q17 | For your [child’s] visit, how would you rate your experience of getting information about other types of treatments? | 1. Poor  
2. Fair  
3. Good  
4. Very good |

**COMPETENCE**

| Q18 | Did the health care provider examine you? | 1. Yes  
2. No |
| Q19 | In your opinion, was the [health care provider’s] skill adequate for your [child’s] treatment? | 1. Yes  
2. No |

**AVAILABILITY**

| Q20 | Did the health care provider prescribe any medicine for you [your child]? | 1. Yes  
2. No |
| Q21 | Did you understand the instructions about the medicines? | 1. Yes  
2. No |
| Q22 | Of the medicines that were prescribed for you [your child], how many of them were you able to get? | 1. All of them  
2. Most of them  
3. Some of them  
4. None of them |
| Q23 | Which reason best explains why you [your child] did not get all the medicines you were prescribed? | 1. Could not afford  
2. Could not find all  
3. Some not on insurance list  
4. Other(specify)…………………….. |
<table>
<thead>
<tr>
<th>Q24</th>
<th>In your opinion, were [the health care provider’s] drug supplies adequate for your [child’s] treatment?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Yes</td>
</tr>
<tr>
<td></td>
<td>2. No</td>
</tr>
</tbody>
</table>

**TANGIBLES**

<table>
<thead>
<tr>
<th>Q25</th>
<th>For your [child’s] visit, how would you rate the cleanliness of the facility?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Poor</td>
</tr>
<tr>
<td></td>
<td>2. Fair</td>
</tr>
<tr>
<td></td>
<td>3. Good</td>
</tr>
<tr>
<td></td>
<td>4. Very good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q26</th>
<th>How neatly appearing are the staff of the facility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Poor</td>
</tr>
<tr>
<td></td>
<td>2. Fair</td>
</tr>
<tr>
<td></td>
<td>3. Good</td>
</tr>
<tr>
<td></td>
<td>4. Very good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q27</th>
<th>In your opinion was the health care provider’s equipment adequate for your (child’s) treatment?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Yes</td>
</tr>
<tr>
<td></td>
<td>2. No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q28</th>
<th>For your [child’s] visit, how would you rate the comfort of the waiting area?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Poor</td>
</tr>
<tr>
<td></td>
<td>2. Fair</td>
</tr>
<tr>
<td></td>
<td>3. Good</td>
</tr>
<tr>
<td></td>
<td>4. Very good</td>
</tr>
</tbody>
</table>

**RESPONSIVENESS**

<table>
<thead>
<tr>
<th>Q29</th>
<th>For your [child’s] visit, how would you rate the amount of time you waited before being attended to?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Poor</td>
</tr>
<tr>
<td></td>
<td>2. Fair</td>
</tr>
<tr>
<td></td>
<td>3. Good</td>
</tr>
<tr>
<td></td>
<td>4. Very good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q30</th>
<th>For your [child’s] visit, how would you rate your experience of being greeted and talked to respectfully?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Poor</td>
</tr>
<tr>
<td></td>
<td>2. Fair</td>
</tr>
<tr>
<td></td>
<td>3. Good</td>
</tr>
<tr>
<td></td>
<td>4. Very good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Q31</th>
<th>For your [child’s] visit, how would you rate the way your privacy was respected during physical examinations and treatments?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Poor</td>
</tr>
<tr>
<td></td>
<td>2. Fair</td>
</tr>
<tr>
<td></td>
<td>3. Good</td>
</tr>
<tr>
<td></td>
<td>4. Very good</td>
</tr>
</tbody>
</table>
| Q32 | For your [child’s] visit, how would you rate your experience of getting enough time to ask questions about your health problem or treatment? | 1. Poor  
2. Fair  
3. Good  
4. Very good |
| --- | --- | --- |
| Q33 | For your [child’s] visit, how would you rate your experience of being involved in making decisions about your health care or treatment? | 1. Poor  
2. Fair  
3. Good  
4. Very good |
| Q34 | For your [child’s] visit, how would you rate the way the health services ensured you could talk privately to health care providers? | 1. Poor  
2. Fair  
3. Good  
4. Very good |
| Q35 | For your [child’s] visit, how would you rate the way your personal information was kept confidential? | 1. Poor  
2. Fair  
3. Good  
4. Very good |
| | Did you feel that you were treated badly by the health care providers at the hospital/health centre/clinic because of your: (Applies to Q36 – Q40) | |
| Q36 | Age | 1. Yes  
2. No |
| Q37 | Sex | 1. Yes  
2. No |
| Q38 | Lack of money | 1. Yes  
2. No |
| Q39 | Social class | 1. Yes  
2. No |
| Q40 | Type of illness | 1. Yes  
2. No |
| **OVERALL SATISFACTION** |  | |
| Q41 | In general would you say you are | 1. Not satisfied  
2. Somewhat satisfied  
3. Satisfied  
4. Very satisfied |
<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q42</td>
<td>In general how would you rate the quality of care you have received today?</td>
<td>1. Poor 2. Fair 3. Good 4. Very good</td>
</tr>
<tr>
<td>Q43</td>
<td>Would you recommend this hospital/health centre/clinic to your friends and relatives?</td>
<td>1. Yes 2. No</td>
</tr>
</tbody>
</table>
Appendix 3: Focus group discussion guide
Focus group discussion for health care users

Introduction

My name is …………………………. And I am here with Felix Doe, a resident of School of Public Health, Legon.

We want to welcome you ladies/gentlemen to this gathering. We are here to know your opinion about the quality of health care you receive at the hospital/health centre/clinic. Particularly about the things you observed and experienced. We want you to feel free to say all that you want to say. What you say here today will help us understand and plan to better the health care received. Information provided or issues discussed will be treated confidentially.

Ground Rules:

There is no right or wrong answers in this discussion

Participants shall introduce themselves;

All what shall be said is important for us. All our discussion will be recorded on tape so that we can refer to it in later. We shall also write down notes.

Rules for the discussion:

One person will talk at a time so that we can all hear clearly and then give our comments when he/she is done;

You may ask question for clarification;

You may disrupt me for comments or contribution as the discussion goes on;

We must try to finish within one hour
1. Please describe to me what quality of hospital care means to you.

2. What does satisfaction mean for you?

3. Please describe to me what you consider more important during your visit to the hospital.

4. Please describe to me what you expect from the hospital and health care personnel.

5. Please describe to me how you feel during your visit to the hospital today.

6. Please describe to me what you would like to improve in your care.

7. What are the factors that cause your feelings of satisfaction or dissatisfaction.

8. What are the factors that cause you to rate the care as high quality or low quality.

9. What is your experience with these factors when you visited the hospital?

10. Please describe to me how you would rate the care you received.

11. How satisfied are you?