SERVICE UTILIZATION AT THE KINTAMPO HEALTH CENTRE: IMPLICATION FOR POLICY FORMULATION.

BY

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IN PARTIAL FULFILMENT FOR THE AWARD OF THE DEGREE OF MASTER OF PUBLIC HEALTH DEGREE OF THE UNIVERSITY OF GHANA

1996
DECLARATION

I declare that all the work in this study has been the result of my own research, except where specific references have been made, and that it has not been submitted towards any other degree, nor is it being submitted concurrently in candidature for any other degree.

..........................................................  ..........................................................
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(STUDENT)                                       (SUPERVISOR)

..........................................................
MR. K. SENAH
(SUPERVISOR)
DEDICATION

This study is dedicated to all those who are contributing to existing knowledge.
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ABSTRACT

From the early 1980s utilization at outpatient services at government health facilities declined considerably, of which the Kintampo Health Centre was a typical example.

The main focus of this study was therefore, to find out the factors that influence utilization at the Kintampo Health Centre.

The study was descriptive. Questionnaire and available routinely collected data from health institutions were used. Sampling was purposive and adults above 19 years were interviewed.

The findings show that, the following factors influence utilization of services:

Proximity
- Presence of competent doctor
- Availability of drugs
- Facilities such as operating theatre

Cost
- Attitude of health providers and
- Clean environment

The result of the study imply that, the demand for health care in rural health centres, such as the one at Kintampo, can be significantly increased if, technically competent and courteous personnel such as medical doctors, with facilities to work with in a very clean environment are available.
CHAPTER ONE

1.1 INTRODUCTION

This study is about the factors that influence service utilization at the Kintampo Health Centre. Health facilities are there to restore and improve the health of the people. Thus people demand health care in order to stay in good health. According to World Bank 1994 Report, poor health increases suffering and reduces people’s alertness and their ability to cope with and enjoy life. It shackles human capital and undermines socio-economic environment conducive to entrepreneurial activities. Good health is a crucial part of well-being, as the old Arab proverb indicates, "he who has health has hope, and he who has hope has everything."

Improved health contributes to economic growth, as it reduces production losses caused by worker illness and it increases the enrolment of children in school and makes them better able to learn. The economic gains are relatively greater for poor people, who are typically most handicapped by ill health.

The negative effect of poor health on economic activity is very alarming. For example, in Nigeria, guinea worm disease temporarily incapacitated 2.5 million people in 1987. It was estimated that, the net effect of the disease was a reduction in rice production by $50 million. (UNICEF 1987).

A study in India showed that, leprosy seriously deformed nearly 30 percent of those affected by the disease and shortened their working lives. The study estimated that, the elimination of
deformity would more than triple the expected annual earnings of those with jobs. The study also indicated that, the prevention of the deformity in all of India’s 645,000 lepers would have added an estimated $130 million to the country’s 1985 GNP. This amount was believed to be equivalent to almost 10 percent of all the official development assistance received by India in 1985. Yet leprosy accounted for less than 1 percent of the country’s disease burden. (World Bank 1993).

Good health permits the use of natural resources that had been totally or nearly inaccessible because of diseases. To take a classic example, in Sri Lanka, the near-eradication of malaria during 1947-77 was estimated to have raised the national income by 9 percent in 1977. The cumulative cost was $52 million, compared with a cumulative gain in national income over the thirty-one years of $7.6 billion, implying a spectacular benefit-cost ratio of over 140. Areas previously blighted by mosquitoes became attractive for settlements. (World Bank 1993).

In recognition of the importance of health, governments all over the world continue to invest large sums of their earnings in health. For example, of the $1,700 billion (8 percent of global income) spent on health in 1990 by all nations of the world, governments spent more than $1,000 billion (nearly 60 percent). Of the $170 billion spent on health in the developing countries, governments spent nearly half the amount. (World Bank 1993).

The government of Ghana continues to invest huge amounts of its scarce resources in the health sector. The total expenditure
for 1993 was 73.37 billion cedis. This showed an overall increase of about 39 percent (in nominal terms) over the previous year’s expenditure. A total of 5.1 billion cedis was spent on capital projects in 1993. This was about 46 percent increase (in nominal terms) over the 1992 expenditure. The Ministry of Health capital provision as a percentage of total government capital budget increased from 3.5 percent in 1985 to about 8.0 percent in 1995. (Ministry of Health, 1994).

The huge investment has yielded some remarkable results. For example, life expectancy has improved from 49 years in 1960 to 55.7 years in 1994; and infant mortality rate is estimated at 82 deaths per thousand live births as against 111 deaths per thousand live births in 1970.

This shows that there has been improvement, but there is more to do. For example, life expectancy in Ghana is 55.7 years, compared with 62 years for low-income developing countries. The country’s infant mortality rate is 82 deaths per thousand live births compared with 71 deaths per thousand live births for low-income developing countries and 38 deaths per thousand live births in middle-income developing countries. (World Bank 1993).

Table 1.2 shows that 44.4 percent of the adult labour force experienced illness or injury between 1988 and 1989, with 26.4 percent inactive. These show the burden of ill health in the country’s labour force. These workers lost about 5 full days of work on average and the cost of treatment amounted to about 7 percent of their normal monthly earnings. This shows that the
The economic effects of adult labour force illness are substantial.

Table 1.2 Economic Burden of Illness for the Labour Force Ages 20 - 50 years in Ghana, 1988-89.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers experiencing illness/injury</td>
<td>44.4</td>
</tr>
<tr>
<td>Workers inactive due to illness/injury</td>
<td>26.4</td>
</tr>
<tr>
<td>Average work days lost to ill or injured workers</td>
<td>4.8</td>
</tr>
<tr>
<td>Share of normal monthly earning used to treat illness/injury</td>
<td>6.7</td>
</tr>
</tbody>
</table>


The government has recognised that good health is a prerequisite for socio-economic development. As a result it has and continues to put in efforts to improve the health of the people, especially those in the rural areas. Health centres are being established and existing ones expanded. However, the government's ability to finance and expand health services has been undermined by unstable economic performance. For example, according to World Bank 1995 Report, the average annual rate of inflation increased from 35.2 percent in 1970-80 to 40 percent in 1980-91. The per capita GNP had fallen from US$539 in 1974 to about US$400 in 1991. In 1985, it was estimated that about 48 percent of the population was below absolute poverty level. The problems were also compounded by the high rates of population growth estimated at between 2.6 and 3.1 percent per annum.
As a measure to ensure sustainability and efficiency in the delivery of health care service, higher user-fees was introduced in Ghana in 1983 and increased in 1985 at all government health facilities.

Utilization of out-patient services dropped sharply and it was attributed to the higher user-fees (Waddington and Enyimayew 1989).

In Ghana efforts are being made to improve utilization after the 1980s set-backs. This study at Kintampo Health Centre, is intended to be a contribution to the effort to improve the productive life of the people.

1.2 STATEMENT OF THE PROBLEM

In September 1995, during my practical fieldwork at the Kintampo Health Centre, examination of the records of service utilization from 1983 to 1995 showed a sharp drop followed by fluctuating levels. According to the records, in 1983 the Outpatient Department recorded a total of 55,368 patients. However, this figure dropped to 8,246 in 1986, followed by a slight increase to 13,597 in 1990. In 1995, I have estimated it to be about 18,500, representing about 33.4 percent of the 1983 level. (See Table 1.2 and figure 1.1).

Despite the huge investment in the health centre, it was evident that demand for its services was far below expectation. Thus virtually rendering the health facility of little practical use to the people. However, a health centre is built to help restore and improve upon the health of people. Thus, if Kintampo Health Centre is not doing this, then a problem exists.
Table 1.2 Out Patients Attendance Kintampo Health Centre 1983 - 1995 (January - October)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ATTENDANCE</th>
</tr>
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<tbody>
<tr>
<td>1983</td>
<td>55,368</td>
</tr>
<tr>
<td>1984</td>
<td>27,192</td>
</tr>
<tr>
<td>1985</td>
<td>20,254</td>
</tr>
<tr>
<td>1986</td>
<td>8,246</td>
</tr>
<tr>
<td>1987</td>
<td>13,036</td>
</tr>
<tr>
<td>1988</td>
<td>12,772</td>
</tr>
<tr>
<td>1989</td>
<td>13,604</td>
</tr>
<tr>
<td>1990</td>
<td>13,597</td>
</tr>
<tr>
<td>1991</td>
<td>8,138</td>
</tr>
<tr>
<td>1992</td>
<td>9,932</td>
</tr>
<tr>
<td>1993</td>
<td>15,254</td>
</tr>
<tr>
<td>1995 (Jan. Oct.)</td>
<td>15,421</td>
</tr>
</tbody>
</table>

1.3 OBJECTIVE OF THE STUDY

The overall objective of the study is to determine the factors influencing service utilization at the Kintampo Health Centre and use the findings to recommend policies that will improve utilization of government health facilities.

In furtherance of this objective, the specific objectives of the study will be to:

- study the outpatient utilization pattern.
- find out clients’ perspective of the service they receive and reason for using and not using the health facility.
- analyse the findings and discuss the policy implication of the findings.
For 1995, attendance is for Jan - Oct.
1.4 DEFINITION OF CONCEPT

Using Tanahashi 1978 definition, utilization is regarded as the relationship between service capacity and output. It is normally expressed as the ratio between output and capacity.

It is assumed that, for one to use a health service, first it must be relevant to his problem, be within reach and affordable.

For the purpose of this study, I am assuming the capacity of the service at the Kintampo Health Centre to be the 1983 OPD attendance number, because it is the highest ever recorded.

In the case of the service utilization, I am looking at the outpatient attendance only, because reliable information is available.

1.5 METHODS

The study is descriptive.

1.5.1 TARGET GROUP

The study population consisted of adults of 18 years and above who can take decisions for themselves with regard to the use of the health centre. Guardians of young people below 18 years were also interviewed since they took decisions concerning the health of their wards or children.

1.5.2 SAMPLING TECHNIQUE

The Kintampo township is divided into five administrative zones by the District Administration. For the study, all the five
zones were covered. In each zone twenty-five compounds were randomly selected. At the centre of each zone, a pen was spinned and the direction of the point of the pen was where we started from the first compound. From this point, every fourth compound was taken. At the end of the row of compounds, we voted and the right hand direction was chosen. The movement was zig-zag.

This sampling method was used because the compounds were not systematically numbered. Also, mapping and numbering the compounds was not feasible, because of the limited time and the cost involved.

In each compound, one adult was interviewed. This was the one seen first by the research team. This was done so that the previous respondent’s views do not influence the next respondent.

Two research assistants were recruited from the Health Research Unit at Kintampo. Both were males and have been with the Unit for the past one year after completing their secondary school education. They were natives from the District.

They were given a two-day training. The objectives of the study were made clear to them. The questionnaire was shown to them. They were asked to interpret the questionnaire in the Akan language which is the common language spoken in the district. This was to let them understand the questions and also be able to communicate effectively with the respondents. They were briefed on how the compounds were to be selected and those to be interviewed.

The questionnaire was pretested in five areas which were not part of the sampled areas. After the pretesting, a number of
questions were modified or deleted to make them clear to the respondents.

1.5.3 DATA COLLECTION

Data collection lasted three days. For the first two days we worked together, but on the last day we separated into three teams.

Routinely available data from the Kintampo Health Centre and the Regional Biostatistics Unit in Sunyani were collected. The data was obtained from the monthly returns books kept by each institution. The information I collected was monthly number of outpatient attendance.

Outpatient attendance of the Holy Family Hospital at Techiman was collected from the Management Information System Unit of the hospital, which indicates the number from the Kintampo District.

Qualitative information was also collected from the respondents and the service providers, through in-depth interviews. In all fifteen health providers were interviewed. Ten of them have been at the health centre for over ten years.

Views sought from them ranged from issues such as the history of the health centre, infrastructures and personnel and improvements that they think are needed at the health centre.

1.5.4 DATA ANALYSIS

The data collected was analysed by hand using manual sorting and tally counting.
Dummy tables and tabulations made with frequency counts were used to summarize the data into statistical tables.

1.5.5 LIMITATION

The sample size was not based on any statistical calculation and the number was not large enough. The study was limited to the Kintampo township. However, being the administrative capital almost all the people from the other sub-districts are well represented. The training and pretesting of collection tools could make up for the small sample size.

Since the area map was not available and the compounds were not systematically numbered, there could be errors in the selection of compounds.

1.6 CONCEPTUAL FRAMEWORK

This study focuses on the concept of utilization. According to Tanahashi, utilization refers only to the service and its measurement is only indirectly related to the size of the target population.

From Fig. 1.2 one can see that the number of people for whom the service can be provided expresses the service capacity and indicates the potential of the service. On the other hand, the number of people who have received the service expresses the service output and indicates the actual performance of the service.

Moseley (1979) identified accessibility which he referred to as ‘get-at-able’ to affect utilization. Relating to Fig. 1.2
health facilities are established for a greater number of people, but most invariably only a few actually enjoy the service. This means that, there are some factors both visible and hidden that act together to affect utilization. It has been shown that factors other than physical availability may intervene to distort utilization. Some of the factors may be the recognition of the need to use the facility. Also the financial ability to use it and the quality of care provided at the facility are also prominent.

Figure 1.2 Schematic Model of Health Service Coverage and Utilization

1.7 LITERATURE REVIEW

This section looks at what others have done and their findings. This is to give us background information about service utilization.

The intention of setting up a health facility is for the facility to intervene successfully in the health problems of the people.

STUDIES IN UTILIZATION

The issues of who uses which health services, how much and when have been a preoccupation of scientist for many years and more recently of health planners.

The study of health care utilization has its genesis in Jarvis's detection in the mid 19th century of an inverse relationship between distance from mental hospital and admission rates.

Despite the fact that in developed countries, many studies have identified a range of variables influencing utilization behaviour and of late the developing countries, there is still imperfect understanding of exactly how and why services are used.

As noted by Stock 1987, it is difficult to focus on how people conceptualize health issues and how and why they decide to implement various therapeutic strategies. The complexity of the field was clearly identified in the early part of 1970 in McKinlay's 1972 review of approaches to the study of utilization.
The merits and shortcomings of single-factor explanation of utilization behaviour are increasingly becoming apparent as a number of discrete but often interrelated variables, such as costs, quality and distance, appear to influence health care utilization. (Phillips 1990).

MODELS IN UTILIZATION

For services to be well organized in order to serve as many people as possible, empirical studies of health care utilization and in-depth knowledge of its characteristics and influences needs to be looked at. In line with this, models have been applied in the field of public health to determine and predict health services utilization. The models have helped to illustrate the interrelations among variables influencing health care usage. The majority of the models have evolved since the late 1950s.

Many of the earlier models hold implicitly that underutilization is the main problem in social services such as health, and that this should be a concern for health planners and providers who wish to optimise the use of facilities for their intended population. However, later models appear to regard underutilization as less important.

Most of the earlier models stressed on the psychological readiness to act, whereby a person believes he/she is sick. However, Suchman 1964, placed great reliance on social group influence and less emphasis on the psychological state of readiness. This model recognizes the fact that, the accessibility
of family or friends in an individual's social network can therefore influence the extent to which he or she can avail himself or herself of these sometimes valuable alternative resources in health care and so can directly influence utilization behaviour. This aspect of the model might be of relevance to health care utilization in Ghana, where lay persons perform important advisory or even curative roles.

The majority of the models today recognize the existence of various predisposing factors such as family size and health belief, enabling factors such as the community's health resources and socio-economic status and finally the need factor which is measured by illness. However, it is also possible to envisage utilization as the product of characteristics of patient, provider and system. (Aday and Andersen, 1974).

Utilization as stated earlier in this section, is the outcome of many complex interactions among many variables and factors, visible and hidden, which act at different stages. It is impossible to observe the whole process.

Factors documented in studies of utilization tend to vary from one academic discipline to another, for example, the economists emphasize on cost factors, while the psychologists stress on various behavioural factors. (Phillips 1990).

However, many researchers for example Lee 1980 are of the view that, it is the experience of illness rather than the biological reality of disease that causes people to consult other persons about their health. They have pointed out that the belief of
individuals and groups about the behaviour they should undertake for any given condition can be crucial in determining utilization.

COST OF SERVICES

The cost of using health care are usually expressed in user charges. However, making a choice in a world of scarcity requires giving up something else. Thus, the actual cost of using health care services is given by the opportunity cost, that is the cost or value of the good or service foregone. Akin et al 1985, point out that, the opportunity cost of using health care is approximated by the sum of the price paid to reach the facility, the price paid for the service and the price paid for any medicines. Prices have two components: a cash monetary cost and an indirect cost in terms of time.

Concern remains widespread that, the introduction of user-fees in government-operated facilities could deny the poorest people access to modern health facilities. This assertion is from the fact that higher prices would reduce demand for the services due to affordability. However, opinion polls taken before the implementation of user-fees in Tanzania revealed that 87 percent of respondents agreed with the statement: "People will pay, provided they are assured of good service." Some 76 percent also agreed that if good services is provided, people will give what little they have to pay for treatment. (Mujinja and Mabala 1992).

A study in Ghana by Waddington and Enyimayew 1989 found out that, the introduction of user-fees in Ghana led to a general
A study by Mwabu 1986 in rural Kenya indicated that, choice of service in free government clinic, pharmacy, mission clinic or traditional healer, varied depending on the nature of the illness. It was found out that, although fairly well dispersed in the area, government clinics were used by only about 30 percent of the respondents. The proportion using government facilities was found to have declined for subsequent visits.

This suggests that factors other than direct costs were influencing behaviour.

Charging user-fees clearly affects the use of health services, but the negative impact of prices on the demand for services can be greatly offset, by improving the quality of services offered.

Experience from the Bamako Initiative reveals that, users are more willing to pay for tangible products such as drugs.

DISTANCE

Distance was one of the earliest factors found to act as a barrier or disincentive to attending health facilities. However, where there is a good road network or good and affordable transport, its effects will be less severe.

The effects of distance on utilization of health services have been of major interest to medical geographers. Studies have
identified a negative relationship between distance and utilization. However, this relationship may vary according to illness and that it is not necessarily always negative or constant. (Phillips 1990).

Distance decay is well-recognized spatial phenomenon which means that as a service or facility becomes more distant fewer people will patronize it. In general, studies tend to confirm a more or less gradual fall-off in utilization rates over distance, although the steepness of decline varies considerably from facility to facility. Distance decay is also known to operate differently for different social groups.

It is generally agreed that, only those close to a facility can derive full benefits from its services. Fosu 1986 indicated in a survey of health centre utilization in Ghana, that, 70 percent of attenders came from within a 3-mile radius, although the residents of this area comprised only 23 percent of the health centre’s catchment population. Only 27 percent of attenders had come from beyond 4 miles, but 73 percent of the health centre’s catchment population lived at that distance.

This implies that, if the maximum travel threshold is exceeded, utilization of health services will tail off considerably.

AGE AND SEX

Age and sex have long been identified as two variables influencing utilization rates and types of services used. There
have been some suggestions that elderly people are more likely than younger age groups to use traditional practitioners. Age however, does not necessarily have a clear influence on utilization rates. However, women with children under 5 years are bound to use the service more due to the fact that, those under 5 years are more at risk in terms of health.

EDUCATION

One of the recent issues of interest is the effect of education on utilization of health services. It has been observed that, education enhances both the knowledge of the use of health services and how to use them effectively. However, its effects are linked with income and socio-economic status.

A study in Cote d'Ivoire, found out that, having some education was associated with a higher use of hospitals as a source of primary care than was having no education (Lasker 1981).

PLURALISTIC HEALTH CARE SYSTEM

Another important factor that seems to impinge on utilization in most parts of Ghana is the existence of pluralistic health care systems, which gives people a wider choice of types of therapies to utilize.

It is known that, the use of various types of service will be much influenced by cultural prescriptions and the experience and opinions of others. Many patients may regard more than one type of therapy as appropriate.
Most patients use two or more types of therapy concurrently. The choice of a modern therapy may follow non-success with a traditional remedy and vice versa.

In a study conducted by Ojanuga and Lefcowite 1982 in Nigeria, four types of consumers were identified:

1. those who used either western or traditional medicine exclusively.
2. those who used traditional medicine first and when dissatisfied, modern medicine.
3. those who went from modern to traditional medicine.
4. those who use both types simultaneously.

In Ghana, those who used both types simultaneously, are likely to be the dominant group, but study needs to be done to ascertain the fact. Thus in pluralistic health care system, patient satisfaction plays a major role as to which health care facility to use when sick.
CHAPTER TWO

2.1 KINTAMPO: A DESCRIPTIVE PROFILE

In this chapter we shall describe the Kintampo District, because the study took place in this area. It is important for readers to have a brief idea as to how the area looks like.

Specifically in this chapter we shall discuss in brief, issues such as, geographical location, population structure and social services of the district.

The district is one of the thirteen districts in the Brong Ahafo Region in Ghana. The district was carved out of the former Nkoranza and the Wenchi District in 1989.

2.2 GEOGRAPHY

The district covers a total area of 7162 sq.km and forms part of the Kwahu-Wenchi range. It is believed that, its headquarters, Kintampo is the mid-point of Ghana. It is about 460 km from Accra, the capital of Ghana and 130 km from Sunyani, the regional capital of Brong Ahafo. The vegetation is high savannah grassland with secondary forests concentrated along the river valleys. The land is well-drained with a lot of streams most of which are perennial. The district has two rainy seasons corresponding to the farming seasons. The major season is from March to June and the minor from mid-July to November.
Fig. 2.1 A map showing the study area: Kintampo District
2.3 DEMOGRAPHY

The district has a population of 140,125 (projected from the 1984 census), and a population density of 19.1 per sq.km. The annual growth rate is between 2.6 to 3 percent.

The population structure depict a typical developing country population structure with children up to 14 years representing about 47 percent of the total population (Table 2.1). This is almost similar to the national figure which is about 45 percent.

Table 2.1 ESTIMATED POPULATION STRUCTURE OF KINTAMPO DISTRICT 1995

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>POPULATION</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1 year</td>
<td>5605</td>
<td>4</td>
</tr>
<tr>
<td>1 - 4 years</td>
<td>22420</td>
<td>16</td>
</tr>
<tr>
<td>5 - 14 years</td>
<td>37834</td>
<td>27</td>
</tr>
<tr>
<td>15 - 49 years</td>
<td>57451</td>
<td>41</td>
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<tr>
<td>50 - 60 years</td>
<td>12611</td>
<td>9</td>
</tr>
<tr>
<td>60+</td>
<td>4204</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>140125</td>
<td>100</td>
</tr>
</tbody>
</table>

From table 2.2 it could be seen that about 32.8 percent of the total population in the district comes from the administrative capital and its surrounding areas. This is similar to the picture in Ghana, where a little over 30 percent of the population lives in urban areas.
### Table 2.2  PROJECTED POPULATION BY SUB-DISTRICTS, 1995

<table>
<thead>
<tr>
<th>SUB-DISTRICT</th>
<th>POPULATION</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kintampo</td>
<td>45,939</td>
<td>32.8</td>
</tr>
<tr>
<td>Dawa2awa</td>
<td>21,798</td>
<td>15.5</td>
</tr>
<tr>
<td>New Longoro</td>
<td>19,228</td>
<td>13.7</td>
</tr>
<tr>
<td>Kunsu</td>
<td>15,068</td>
<td>10.8</td>
</tr>
<tr>
<td>Jema</td>
<td>14,976</td>
<td>10.7</td>
</tr>
<tr>
<td>Amoma</td>
<td>12,469</td>
<td>8.9</td>
</tr>
<tr>
<td>Anyima</td>
<td>10,647</td>
<td>7.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>140,125</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: District Profile, 1994.

There are 150 settlements with numerous scattered hamlets. This militates against developmental facilities such as clinics and schools, because they have population of less than 500.

The Brong and Mo are dominant ethnic groups, with a large immigrants population from the northern part of Ghana, namely: Dagomba, Konkomba and Dargati. From the south Dangbe and Ewe have settled mainly along the banks of the Volta River for the purpose of fishing and farming.

### 2.4 ECONOMIC ACTIVITIES

Subsistence farming is the main occupation of the people. Yam, maize and tobacco are the main food and cash crops produced. Vegetables and legumes are also produced on significant scale for consumption and for sale. Poultry and livestock are kept for domestic purposes.
The district has a very important market, which is an incentive for good economic activities. The market day is on Wednesdays.

2.5 EDUCATION

Although statistical figures are not available, casual observation shows that, the literacy rate in the district is very low.

Just about 19 percent of children under 5 years are in School and nearly 61 percent of children of school-going age are in primary school. As we move to the higher levels the situation worsens. For example, only 17 percent and 3 percent of children who are supposed to be in J.S.S. and S.S.S. respectively are in school.

Table 2.3 DISTRIBUTION OF SCHOOL ENROLMENT BY CATEGORIES IN THE KINTAMPFO DISTRICT, 1995

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>NUMBER OF SCHOOL</th>
<th>TOTAL ENROLMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>70</td>
<td>4351</td>
</tr>
<tr>
<td>Primary</td>
<td>119</td>
<td>14191</td>
</tr>
<tr>
<td>J. S. S.</td>
<td>41</td>
<td>4048</td>
</tr>
<tr>
<td>S. S. S.</td>
<td>2</td>
<td>633</td>
</tr>
</tbody>
</table>


This shows a high drop-out of children at the higher levels. This situation is of great concern, since households with highly
educated members enjoy better health.

2.6 POLITICAL ORGANIZATION

The district has Kintampo as both the administrative and traditional capital.

In line with the new local government system, the District Chief Executive is the political head. The District Chief Executive is supported in the day-to-day running of the district by the District Assembly, the Executive Committee within the Assembly and the various Sub-Committees, such as the Economic Development and the Social Services.

In the traditional sector, there are problems which are yet to be resolved. For example, there is misunderstanding between the Brongs and the Mos as to who have right over the district. In view of this, there is no paramount chief and no clear line of authority. Thus mobilization of the communities for community development is lacking.

2.7 TRANSPORT AND COMMUNICATION

There are two first-class roads in the district; the Techiman to Tamale (through Kintampo) and Techiman to New Longoro. They form part of the national trunk road network linking the north to the southern part of the country. Also there are two stretches of second class roads. Most of the communities are linked by third class roads and permanent tracks, most of which become virtually unmotorable during the rainy season.
This makes health outreach programmes very difficult and sometimes virtually impossible.

2.8 HEALTH FACILITIES

Up to the latter part of 1994, health services had been provided from 2 health centres; Kintampo and New Longoro health centres. Three new rural health centres have been constructed in addition to the two. There are three private maternity homes in the district. There is an MCH/FP Clinic at Jema in addition to the one at the Kintampo Health Centre.

In all 91 out of the 150 communities are provided with outreach services. These services include growth monitoring, immunization, health education, MCH/FP services and common ailment treatment.

Table 2.4 DISTRIBUTION OF HEALTH FACILITIES IN KINTAMPO DISTRICT, 1995

<table>
<thead>
<tr>
<th>Sub-District</th>
<th>Health Facility</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kintampo</td>
<td>Health Centre</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Private Maternity Home</td>
<td>2</td>
</tr>
<tr>
<td>Jema</td>
<td>MCH/FP Clinic</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Private Maternity Home</td>
<td>1</td>
</tr>
<tr>
<td>Amoma</td>
<td>Health Centre</td>
<td>1</td>
</tr>
<tr>
<td>Kunsu</td>
<td>Health Centre</td>
<td>1</td>
</tr>
<tr>
<td>Anyima</td>
<td>Health Centre</td>
<td>1</td>
</tr>
<tr>
<td>New Longoro</td>
<td>Health Centre</td>
<td>1</td>
</tr>
<tr>
<td>Dawadawa</td>
<td>Served from Kintampo Health Centre.</td>
<td></td>
</tr>
</tbody>
</table>
There is a National Rural Health Training School and a Health Research Unit. The school trains Technical Officers in Disease Control and Nutritional Officers. The Research Unit which started about a year ago is researching in vitamin A supplementation for infants.

The population-bed ratio for the district is about 3,500, while for the Brong Ahafo Region is 1,257 and for Ghana is 1,204. The population per doctor in the district is about 70,062, while in Ghana there is 1 doctor to 21,300 persons. WHO recommends a minimum of 1 doctor to 10,000 persons ratio for developing countries.

This shows how woefully inadequate health resources are in the district. This may affect the quality of care, if available to potential clients.

2.8 ENABLING ENVIRONMENTAL FACTORS TO HEALTH

The entire district has no access to conventional water supply. From Table 2.5 it could be seen that, rivers and streams are the major sources of drinking water for the people. It is estimated that about 25 percent of the population have no access to safe drinking water.
Table 2.5 SOURCES OF WATER SUPPLY, KINTAMPO DISTRICT, 1995.

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rivers and Streams</td>
<td>50</td>
</tr>
<tr>
<td>Spring water</td>
<td>20</td>
</tr>
<tr>
<td>Dams/Ponds</td>
<td>13</td>
</tr>
<tr>
<td>Hand dug wells</td>
<td>10</td>
</tr>
<tr>
<td>Bore holes</td>
<td>5</td>
</tr>
<tr>
<td>Rain catchment</td>
<td>2</td>
</tr>
<tr>
<td>All sources</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: District Profile

Apart from the bore holes and some of the hand dug wells, the water supply sources are not protected from contamination.

Indiscriminate defaecation is still practiced. There are only seven KVIPs in the district and six septic tanks. The majority of the people use pit latrines.

Table 2.6 HUMAN EXCRETA DISPOSAL FACILITIES - KINTAMPO, 1994

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>KVIP</td>
<td>7</td>
</tr>
<tr>
<td>Septic tank</td>
<td>6</td>
</tr>
<tr>
<td>Bore hole latrines</td>
<td>23</td>
</tr>
<tr>
<td>Pit latrines</td>
<td>Available in all communities</td>
</tr>
</tbody>
</table>

Source: District Profile. 1994
It could be seen that good human excreta disposal facilities are inadequate.

Crude dumping of solid waste is the most common practice.

There is no proper drainage system in the district. Burrow pits can be found all over, as a result of erosion. Most of them are choked with solid wastes and are good breeding sites for mosquitoes and contamination of drinking water sources.

Good sanitary practices are extremely important to health. The poor sanitation in the district is a major health risk. Quite expectedly therefore, communicable diseases feature prominently in the OPD attendance. Malaria and Diarrhoea continue to dominate in the top five diseases reported at the OPD (see Table 2.7). For example in 1993 there were 2256 reported cases in malaria, but in 1994 the number rose to 6067, an increase of about 169 percent. In the case of diarrhoea the increase was 54.5 percent. The reported cases in 1993 was 789 and in 1994 there were 1219 cases.

Table 2.7 TOP 5 DISEASES IN OPD ATTENDANCE, KINTAMPO DISTRICT 1993-94

<table>
<thead>
<tr>
<th>DISEASE</th>
<th>1993</th>
<th>1994</th>
<th>% INCREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>2256</td>
<td>6067</td>
<td>168.9</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>789</td>
<td>1215</td>
<td>54.5</td>
</tr>
<tr>
<td>Accidents</td>
<td>125</td>
<td>1015</td>
<td>712.0</td>
</tr>
<tr>
<td>Skin Diseases</td>
<td>100</td>
<td>816</td>
<td>716.0</td>
</tr>
<tr>
<td>Intestinal worms</td>
<td>217</td>
<td>675</td>
<td>211.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3487</td>
<td>9792</td>
<td><strong>180.8</strong></td>
</tr>
</tbody>
</table>

Source: District Profile. 1994
The immunization coverage in the district is low. The district is behind the 80 percent goal of the health sector. For example, the coverage for DPT3 and OPV3 are 34 percent and 36 percent respectively. The previous years were 26 percent for DPT3 and for OPV3 25 percent. Table 2.8 below shows the immunization coverage of the district over a two-year period.

An enabling environment for good health has been impeded by these factors and others.

Table 2.8 IMMUNIZATION COVERAGE, KINTAMPO DISTRICT 1992-94

<table>
<thead>
<tr>
<th></th>
<th>1992 (%)</th>
<th>1993 (%)</th>
<th>1994 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCG</td>
<td>44</td>
<td>63</td>
<td>61</td>
</tr>
<tr>
<td>DPT3</td>
<td>26</td>
<td>26</td>
<td>34</td>
</tr>
<tr>
<td>OPV3</td>
<td>24</td>
<td>25</td>
<td>36</td>
</tr>
<tr>
<td>MEASLES</td>
<td>38</td>
<td>50</td>
<td>87</td>
</tr>
</tbody>
</table>

Source: District Profile, 1994
CHAPTER THREE

3.1 KINTAMPO HEALTH CENTRE: A DESCRIPTIVE PROFILE

In this Chapter, I present a description of the Kintampo Health Centre where the study was undertaken. This exercise is necessary to provide a background for the appreciation of the peoples' attitude towards the centre.

LOCATION

The health centre is located in the administrative capital of the district. Thus almost the mid-point of the district. Therefore, it is within the reach of about 52 percent of the total population of the district.

HISTORICAL ORIGIN

The Kintampo Health Centre was built by the British Reserve Force in then Gold Coast. It was to offer medical services to the British forces who were then stationed in that part of the country. It was handed over to the Ministry of Health when the British forces left the country.

Currently, it is the principal health facility in the district and it is in the process of being upgraded into a District Hospital.
STRUCTURES
The structures are the same as left by the British. Few have been renovated and the rest are in bad state. The only new structure is the small block which houses the male, female and the children wards. There are few residential blocks for the staff.

FACILITIES/SERVICES
The health centre has about twenty beds. Out-patient clinic consultation is provided at the centre by two doctors and a medical assistant. It is the main services provided. Minor surgical and obstetrical services are offered. In-patient services are very minimal. There is a pharmacy department, while the laboratory and x-ray services are being set-up. There is an operating theatre but at the moment not functioning. The Maternal and Child Health Unit offer services such as antenatal services which are held twice a week, child welfare clinic and family planning services. The unit also undertake outreach services, during which curative treatment, immunization, health education and maternal and child health services are provided.

PERSONNEL
Currently, there are two medical doctors after almost eight years without one. There is a medical assistant and a dispensing technician. The following categories of nursing staff are available:
Senior Nursing Officer 1
Staff Nurse/Midwife 2
Staff Nurse 1
Staff Midwife 1
Enrolled Midwife 1
Senior Enrolled Nurse 2
Enrolled Nurse 3
Community Health Nurse 5
Ward Assistant/Orderly 8

There are few paramedical staffs

CURRENT DEVELOPMENTS

As stated earlier, the health centre is in the process of being upgraded into a District Hospital. As a result, a new and bigger out-patient department is being built.

The operating theatre is also being renovated.
CHAPTER FOUR

4.1 RESULTS

In this chapter, I will focus on the findings obtained from the questionnaire. More specifically to try to answer why potential clients use or do not use the health centre at Kintampo.

I begin with the socio-demographic characteristics of the respondents. There were 108 respondents in all.

4.2 SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Socio-demographic characteristics were not investigated to see how they affected service utilization at the Kintampo Health Centre. However, it is important to see whether the respondents are a true reflection of the people in the district.

AGE

In all 55.6 percent of the respondents were within the age group 15 - 44 years, while 36.1 percent were in the 45 - 60 year group. The 61 and above year group, represented 8.3 percent. This is consistent with the population structure of the district (see Table 2.1).

GENDER

There was a little higher female respondents (51 percent) than male (49 percent). This is not the true reflection in the
district, where males constitute about 51 percent of the population and female 49 percent. The reason could be due to the fact that, women stayed at home during the period when interviews were held than men.

**OCCUPATION**

Occupation is said to affect service utilization, since those in the higher income brackets turn to use health services more than those in the lower group.

In this study, it was not possible to group the respondents in the different income groups. As a result it would not be possible to state whether the finding is consistent with the above stated fact.

From the data, about 34.3 percent of the respondents were farmers with traders constituting 26.9 percent. The unemployed were 15.7 percent, while 7.4 percent were teachers. Another 15.7 percent were engaged in other occupations such as, dress-makers, clerks and drivers.

**RELIGION**

In a pluralistic health system, like Ghana, one’s religious belief may affect his choice of where to go for treatment when sick. This study as already stated, did not look at the relationship between religion and service utilization. The respondents were asked of their religious belief to see whether it reflects the general trend in the district. Of the total
respondents, 58.4 percent were Christians and 32.4 percent were Muslim. The traditionalists represented 4.6 percent and another 4.6 percent belongs to no religious group.

EDUCATIONAL STATUS

It is believed that, those with higher education are more likely to use health facilities than those with low educational level.

Table 4.1 provides an analysis of the educational levels of the respondents. It is expected that, lower educational level respondents will dominate to reflect with the general situation in the district. In all, 57.4 percent of the respondents have had no education, while 5 percent were primary school leavers. A total of 25 percent were middle school/JSS leavers, with 8 percent having secondary school/SSS education. Just 8 percent were of post-secondary school levels.

Table 4.1 Breakdown of Educational Levels Among the Respondents

<table>
<thead>
<tr>
<th>EDUCATIONAL LEVEL</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Education</td>
<td>62</td>
<td>57.4</td>
</tr>
<tr>
<td>Primary School</td>
<td>5</td>
<td>4.6</td>
</tr>
<tr>
<td>Middle School/JSS</td>
<td>25</td>
<td>23.2</td>
</tr>
<tr>
<td>Secondary School/SSS</td>
<td>8</td>
<td>7.4</td>
</tr>
<tr>
<td>Post-Secondary</td>
<td>8</td>
<td>7.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>108</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
MARITAL STATUS

There are no available data in the district to compare with. However, married respondents were expected to dominate, since divorce is not common in most rural areas in Ghana. Also adults in rural areas marry in early age. Of the total respondents, 63.9 percent were married while 24.1 percent were single. Those separated represented 7.4 percent and widows constituted 4.6 percent of the respondents.

4.3 POTENTIAL CLIENTS

When one becomes ill, there are various places where he can go for treatment. The decision as to where to go are influenced by various factors, such as cost of service, distance and quality of care. (Shaw and Griffin 1995).

In this study out of the 89 potential clients, 66.3 percent used the health centre and 33.7 percent did not use the facility. They either went to other places for treatment or decided to stay at home.

4.4 REASONS FOR USING FACILITY

Users have various reasons for deciding to use a particular health facility when ill.

In this study, the most frequently mentioned reasons for using the health centre were proximity 66.1 percent and the presence of a medical doctor 64.4 percent (see Table 4.2).

The importance of these two factors have been identified in other studies. For example, the positive impact of the presence of
a medical doctor in utilization was identified by Wong, Popkin, Guilkey and Akin 1987 in Philippines. The study found out that, if the professional providing care at public health facility was not a medical doctor, the demand tends to reduce. Phillips 1986 identified the negative relationship between distance and utilization.

Other reasons were mentioned by clients, why they used the health centre. For example, the availability of drugs accounted for 40.7 percent while trust in the health centre was 30.5 percent.

This confirms the assertion made by McKinlay 1972, that service utilization is affected by different groups of factors.

By trust in the health centre, users meant, they have the confidence that they would get appropriate treatment for their illness. In terms of low cost, they were comparing with the cost of attending the Holy Family Hospital at Techiman, which is the nearest hospital in the area. The cost of transportation was taken into consideration.

Table 4.2 DISTRIBUTION OF RESPONSES BY CLIENTS FOR USING KINTAMPO HEALTH CENTRE BETWEEN JAN. TO OCT. 1995

<table>
<thead>
<tr>
<th>REASONS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity</td>
<td>39</td>
<td>66.1</td>
</tr>
<tr>
<td>Presence of Medical Doctor</td>
<td>38</td>
<td>64.4</td>
</tr>
<tr>
<td>Availability of drugs</td>
<td>24</td>
<td>40.7</td>
</tr>
<tr>
<td>Trust in the Health Centre</td>
<td>18</td>
<td>30.5</td>
</tr>
<tr>
<td>Facilities</td>
<td>9</td>
<td>15.3</td>
</tr>
<tr>
<td>Low cost</td>
<td>9</td>
<td>15.3</td>
</tr>
<tr>
<td>Severity of Sickness</td>
<td>7</td>
<td>5.1</td>
</tr>
<tr>
<td>Good human relationship</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Improved Sanitation</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

There were 59 respondents and some gave more than one reason.
When asked, what will make them continue to use the health centre, the following reasons were given. (See Table 4.3) Frequently mentioned reasons were availability of facilities 76.3 percent (such as operating theatre and adequate wards) and availability of drugs 64.4 percent. Drugs were of concern to the clients as a female teacher remarked, "good and non-expiring drugs should be available so that we do not have to buy drugs outside the hospital."

Also commonly mentioned reasons were low cost 33.9 percent, more qualified personnel 32.2 percent and good human relationship was 27.1 percent. The following opinions support these findings. "Money should not be collected in every room, rather, there should be one final charge and receipt be issued for all money that are paid," said a male farmer. A female trader also said: "the hospital workers should be gentle and be polite to the patients. They should not shout at us".

Proximity, the presence of a medical doctor, availability of drugs, cost of service and human relationship, all played a significant role in the demand for the Kintampo Health Centre.

Table 4.3 DISTRIBUTION OF RESPONSES BY CLIENTS FOR CONTINUOUS USE OF THE HEALTH CENTRE

<table>
<thead>
<tr>
<th>EXPECTATIONS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of facilities</td>
<td>45</td>
<td>76.3</td>
</tr>
<tr>
<td>Availability of drugs</td>
<td>38</td>
<td>64.4</td>
</tr>
<tr>
<td>Reduce cost</td>
<td>20</td>
<td>33.9</td>
</tr>
<tr>
<td>More qualified personnel</td>
<td>19</td>
<td>32.2</td>
</tr>
<tr>
<td>Good human relationship</td>
<td>16</td>
<td>27.1</td>
</tr>
<tr>
<td>Good sanitation</td>
<td>14</td>
<td>23.7</td>
</tr>
<tr>
<td>Short waiting time</td>
<td>1</td>
<td>1.7</td>
</tr>
</tbody>
</table>

There were 59 respondents and some gave more than one reason.
4.5 NON-USERS

There are instances when the facility is there, but other factors will make it look as if it does not exist. This happens when those who are supposed to use it decide not to, for various reasons.

In the study, various reasons were given by respondents, why they did not use the facility (see Table 4.4). The commonly mentioned reasons were high cost 46.7 percent, lack of drugs 20 percent. Other reasons mentioned were lack of trust 17 percent, poor sanitation 16.7 percent and inadequate facilities 13.3 percent.

Table 4.4 DISTRIBUTION OF RESPONSES FOR NOT USING THE KINTAMPO HEALTH CENTRE

<table>
<thead>
<tr>
<th>REASONS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Cost</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>Lack of drugs</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Poor human relationship</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Lack of trust</td>
<td>5</td>
<td>17.0</td>
</tr>
<tr>
<td>Poor sanitation</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Lack of facilities</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>No money</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Long waiting time</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Sickness not severe</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Not hospital sickness</td>
<td>1</td>
<td>3.3</td>
</tr>
</tbody>
</table>

There were 30 respondents and some gave more than one reason.

When asked what will make them use the health centre, the most frequently mentioned reasons were availability of drugs 76.7
percent, adequate facilities 50 percent and competent doctors also 50 percent. Other reasons mentioned were reduced cost 46.7 percent and good human relationship 26.7 percent (see Table 4.5).

Table 4.5 DISTRIBUTION OF RESPONSES THAT WILL MAKE THE NON-USERS TO USE THE HEALTH CENTRE.

<table>
<thead>
<tr>
<th>REASONS</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good drugs</td>
<td>23</td>
<td>76.7</td>
</tr>
<tr>
<td>Adequate facilities</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Good Doctors</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Reduced cost</td>
<td>14</td>
<td>46.7</td>
</tr>
<tr>
<td>Good human relationship</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>Availability of herbal drugs</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Free for the Aged</td>
<td>2</td>
<td>6.7</td>
</tr>
</tbody>
</table>

There were 30 respondents and some gave more than one reason.

For those who were not sick or none of their household members were sick during the period of investigation, the most frequently mentioned reasons why they will use the health centre were proximity 84.2 percent, presence of a medical doctor 68.4 percent. Other reasons mentioned were availability of drugs 21.1 percent and low cost 15.8 percent.

From the results, it could be seen that respondents are looking for competent doctors and not just a medical doctor. The cost of services is also important to them, as expressed by a male farmer, "money should not be collected in every room, rather, there should be one final charge and receipt be issued for all money that are paid." Respondents are prepared to pay for quality services. "We go there because there has been an improvement of the services
at the health centre", said a female trader. This was also emphasized by an elderly woman, who said: "they should give us good services as done in Techiman Holy Family Hospital. Since we have to pay, because God has left us alone."
CHAPTER FIVE

5.1 DISCUSSION

Of the respondents who used the health centre, proximity (66.1 percent) was the most frequently mentioned reason why they used the health facility. Of those who were not sick during the study period, if they were sick or any member of their household was sick, of the factors that will make them use the health centre, proximity (84.2 percent) was the most frequently mentioned. This agrees with other studies, such as the one by Fosu 1986, which indicated that more people will use a health facility if it is near them.

However, a study by Haran, Dovlo and Offei 1994, about quality of care in hospitals and health centres in Eastern Region of Ghana, they found out that, among hospital respondents, only 33 percent found proximity to be very important compared to 56 percent who thought it unimportant, but well over 73 percent of the health centre respondents regarded proximity as very important. Though the method used in the study is different from the one used in Kintampo, there seems to be agreement as far as health centres are concerned, that proximity is a very important factor in utilization.

We must not lose sight of the fact that, there are more to utilization than just the proximity of a facility. For example, in the study, of the 89 respondents who were sick or a member of whose household was sick, 30 (33.7 percent) did not use the facility,
despite the nearness of the facility.

This serves to remind us that, proximity interacts strongly with other factors to influence utilization.

The results of the study, shows the importance of proximity in utilization of health services. People are more prepared to use facilities near them and most invariably it is their first choice.

Cost of services seems to be a great barrier to utilization. For example, in the study, of those who were sick, but did not use the health centre, cost (46.7 percent) was the most frequently mentioned reason why they did not use the facility. For them to use it, reduced cost (46.7 percent) was one of the four most frequently mentioned reasons. Even for those who did use the health centre, reduced cost (33.9 percent) is one of the three most frequently mentioned reasons, that will make them continue to use the health centre.

Looking at figure 1.1 in chapter one, one could see that, the introduction of user-fees in 1983 and 1985 were followed by sharp drops in utilization. This is similar to other findings, for example, the study by Waddington and Enyimayew, 1989, in Asante Akim in Ghana, found out that, there were sharp drops in utilization in 1983 and 1985 when user-fees were introduced in Ghana. The possible explanation could be that, the price increase, did not go with improved quality of care. However, a study in Rwanda by Shepard et. al. 1992, to examine whether households would be willing to pay more for health care, showed that, the preference for the higher fees was overwhelming (88 - 93 percent) and the
preference was as strong in low-income households as amongst normal-income households.

The behaviour of utilization and cost can also be seen in figure 6, in appendix. Here, on the first two occasions when OPD fees were increased, attendance fell the subsequent months, but on the third occasion, an increase in OPD fees corresponded with an increase in attendance.

This seems to imply that, there are some other factors, which if well addressed, could offset the effect or some of the effects of cost on utilization. This goes to confirm that, multiple factors act together to affect utilization.

It was observed that, the people were more concerned with the unapproved fees charged at the health facility. As a male farmer remarked, "money should not be collected in every room, rather, there should be one final charge and receipt be issued for all money that are collected."

This suggests that, clients are more than willing to take responsibility of their health care issues, by paying the approved price for the service. This fact is supported by the statement of S. Ofosu Amaah 1989, that, "in the African traditional system, every community and family understood the need to compensate the providers of health services in some form and that free health care conflicted with this tradition and undermined it."

We know that, the effect of higher user fees on utilization has important policy implications. If higher prices substantially reduce demand, then the social benefit of promoting access to
health care would be considerably reduced.

Thus every effort must be made to reduce the unnecessary high cost of services at government health facilities.

At the Kintampo Health Centre, there is a single block used as male, female and children wards. The operating theatre is not functioning. The X-ray and laboratory departments lack equipments and materials to work with. All these turn to make the health centre unattractive to clients.

No wonder, availability of facilities (76.3 percent) was the most frequently mentioned reason that will make those who used the health centre continue to use it and for those who did not use the health centre, availability of facilities (50 percent) was one of the three most frequently mentioned reasons, that will make them use the facility.

Waddington and Enyimayew 1989, found out that, the physical facilities of an institution were another most important component of perceived quality.

Facilities usually enhance the clients satisfaction and willingness to use the health facility again. It relates to the physical appearance, materials and equipments as well as comfort, cleanliness and privacy.

Drugs play a very important role in making people use the health facilities. For example, for continuous use of the health centre by those who used the facility during the period of the study, availability of drugs (64.4 percent) was the second most frequently mentioned reason. The reasons why those who were sick
and did not use the health centre, availability of drugs (20 percent) was one of the three most frequently mentioned reasons, and for them to use the health facility, availability of drugs (76.7 percent) was the highest most frequently mentioned reason. It is important to take note that, not just drug, but good quality was the demand of the clients. A female teacher remarked, "good and non-expiring drugs should be available so that we don’t have to buy drugs outside the hospital."

The importance of drugs was expressed by Annis 1981. He found out that, MCH health centres in Guatemala have a poor drawing power of potential clients because among other things, was the lack of drugs.

Waddington and Enyimayew 1989, also found out that, the availability of drugs was a very important factor in the patients’ perception of quality of service. They observed that, many times, patients expressed their resentment at being charged a consultation fee and receiving a prescription but no drugs.

Haran, Dovlo and Offei 1994, also found out that, among the various list of factors, patients identified availability of drugs as the second most important factor after the presence of a doctor in the quality of care.

From the study, the presence of a medical doctor (64.4 percent) was the second most frequently mentioned reason, that made those who used the health centre use it. For those who did not use the health centre, the presence of good medical doctor (50 percent) was one of the three most frequently mentioned reasons that will
make them use it.

As stated earlier, Haran, Dovlo and Offei 1994, found out that, out of the 7 factors listed, respondents placed the presence of doctor (69 percent) as the most important quality factor.

However, clients are not looking for just a medical doctor, but a competent one, in whom they can put their confidence. For example, of the various factors enumerated by those who used the health centre as the reasons for using the facility, trust, was one of the four most frequently mentioned. For those who did not use the health centre, lack of trust was one of the four most frequently mentioned reasons and for them to use it, good doctors (50 percent) was one of the three most frequently mentioned reasons. Phillips, 1990, also stated that, Filipino mothers always wanted better-trained personnel to attend to them.

The patient always comes to the medical doctor in full confidence that he will be helped and that creates a strong intimate relationship between medical doctors and patients. To enhance utilization, this strong intimate relationship must be maintained by the presence of not just a medical doctor, but a competent medical doctor.

Poor human relationship ranked as the second most important reason for not using the Kintampo Health Centre after high cost of service.

Studies elsewhere have also demonstrated the importance of good human relationship in client perception on the quality of care. A classic example was the study by Waddington and Enyimayew.
1989, which observed that, the public regarded the attitude of staff as extremely important. They stated that, "it was an issue about which people were most passionate."

It has also been found out that, patients often tend to evaluate quality in terms of the perceived efficacy or appropriateness of treatments. However, when lay people cannot judge the contribution of technical intervention to their well-being, bedside manner of the professional's presentation (effective behaviour) becomes crucial. (Phillips 1990)

Really, attitude of providers is of great concern to clients and potential clients, as seen by the expression of an elderly woman, "the hospital workers should be gentle and be polite to the patients, that is, they should not shout at us."

While good human relationship by itself will not relieve the symptoms of clients, its presence attracts them to the facility. Another classic example is a clean environment.

Though quantitative studies were not done, observation from the results and the discussions shows that, \( U = f (P, CD, HR, F, CR, C, D) \)

\[
U = \text{utilization} \\
f = \text{function} \\
P = \text{proximity} \\
CD = \text{technically competent medical doctor} \\
D = \text{availability of drugs} \\
HR = \text{human relationship} \\
F = \text{facilities (eg. wards, operating theatre drugs).}
\]
\[ C = \text{cost of services} \]
\[ CE = \text{clean environment} \]

However, detailed studies need to be done to ascertain this model.

5.2 CONCLUSION

The study was sufficiently modest in its requirements, that it could readily be replicated in other health centres for rapid assessment of factors affecting utilization and improve upon it.

The most important factors that tend to influence utilization were proximity, presence of technically competent medical doctor, direct cost of service, drugs and facilities (physical infrastructures and materials).

These findings were in agreement with previous studies done elsewhere.

A minimum level of physical access is paramount, however, the perceived quality of health care and faith in the provider may be traded off against considerable travel-time for many potential clients.

There is the willingness to use and pay for the service at the health centre, if the illegal fees are abolished and the quality of care improved.

The study shows a relationship linking providers attitude towards clients and utilization. If the effective behaviour of providers is disagreeable to clients, this may deter utilization.
Clients who are poorly treated are likely to avoid using the facility next time.

There is also a relationship between clean environment at the health facility and utilization. This suggests that utilization can improve if good and clean environment is kept to attract potential clients.

5.3 **POLICY IMPLICATION**

A policy design to increase the use of health facilities, by decreasing cost of service and providing facilities at the door steps of the people would be expected to do little to increase demand for these services, if the quality of care is not improved. Quality of care is multifaceted and detailed research needs to be done to identify which of the facets would improve utilization considerably.

Governments and NGOs should not rush in putting up health centres without first making sure that, the various factors that influence utilization are well taken care off.

Satisfactory standards have occurred in our health facilities as a result of discoveries of scientists, economic policies and advances in technology. However, some have stemmed from a desire for social equity, for example, a simple love of humanity. It is with improvements in quality of care inspired by these beliefs that, medical ethics should be seriously taught at our Medical Schools and other health institutions.
At the Regional level:
- Health information systems should be established and equipped with the necessary equipment and personnel at the districts.

The Districts should:
- place a suggestion box at the health facilities in the districts to collect suggestions from clients for improvement of services.
- organise In-service training for all personnel with support from the region, as to how to receive and communicate politely with clients and also to upgrade the technical competence of personnel.
- Set-up libraries with the support of the District Assembly, at all health centres.
- establish incentive package such as, cash award; opportunity for further studies and recognition of good work.
- measures aimed at quality improvement must be integrated into the daily activities of health care delivery.
- the DHMT together with the District Assembly must ensure that dilapidated structures are rehabilitated and the surroundings kept clean with facilities like adequate water supply.
## APPENDIX

**Table 6. WORKLOAD FROM KINTAMPO DISTRICT ON HOLY FAMILY HOSPITAL TECHIMAN 1987-1995 (JANUARY - SEPTEMBER)**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL ATTENDANCE (OPD)</th>
<th>FROM KINTAMPO DISTRICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>64,272</td>
<td>10,283 (16%)</td>
</tr>
<tr>
<td>1988</td>
<td>66,611</td>
<td>11,323 (17%)</td>
</tr>
<tr>
<td>1989</td>
<td>67,773</td>
<td>12,199 (18%)</td>
</tr>
<tr>
<td>1990</td>
<td>68,080</td>
<td>13,616 (20%)</td>
</tr>
<tr>
<td>1991</td>
<td>62,913</td>
<td>11,324 (18%)</td>
</tr>
<tr>
<td>1992</td>
<td>69,480</td>
<td>12,506 (18%)</td>
</tr>
<tr>
<td>1993</td>
<td>50,375</td>
<td>5,642 (11.2%)</td>
</tr>
<tr>
<td>1994</td>
<td>63,216</td>
<td>5,816 (9.2%)</td>
</tr>
<tr>
<td>1995 (Jan-Sept.)</td>
<td>57,390</td>
<td>4,758 (8.2%)</td>
</tr>
</tbody>
</table>
Fig 6.1 OPD ATTENDANCE KHC JUNE '94-OCT '95
SHOWING PERIODS OF INCREASE IN OPD FEES

MONTHS

OPD ATTENDANCE
# KINTAMPO DISTRICT

## FACTORS AFFECTING UTILIZATION AT THE KINTAMPO HEALTH CENTRE

### HOUSEHOLD QUESTIONNAIRE

**HOUSE NUMBER ............**

### BACKGROUND INFORMATION

<table>
<thead>
<tr>
<th>1. AGE</th>
<th>2. SEX M F</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. HIGHEST EDUCATION</td>
<td>4. MARITAL STATUS</td>
</tr>
<tr>
<td>(a) No Education</td>
<td>(a) Married</td>
</tr>
<tr>
<td>(b) Primary School</td>
<td>(b) Single</td>
</tr>
<tr>
<td>(c) Middle School/JSS</td>
<td>(c) Divorce/Separated</td>
</tr>
<tr>
<td>(d) Secondary School/SSS</td>
<td>(d) Widow</td>
</tr>
<tr>
<td>(e) Post Secondary School</td>
<td></td>
</tr>
</tbody>
</table>

5. OCCUPATION

<table>
<thead>
<tr>
<th>6. RELIGION</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Christian</td>
</tr>
<tr>
<td>b. Islam</td>
</tr>
<tr>
<td>c. Traditional</td>
</tr>
<tr>
<td>d. None</td>
</tr>
<tr>
<td>e. Other</td>
</tr>
</tbody>
</table>

7. HAVE YOU OR ANY MEMBER OF YOUR HOUSEHOLD BEEN SICK DURING THIS YEAR?

<table>
<thead>
<tr>
<th>1. YES</th>
<th>2. NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>If Yes go to question 8</td>
<td>If No go to question 13</td>
</tr>
</tbody>
</table>

53
8. DID YOU GO TO OR SEND THE PERSON TO THE KINTAMPO HEALTH CENTRE?

   1. YES  2. NO

   If Yes go to questions 9 and 10
   If No go to questions 11 and 12

9. WHY DID YOU GO TO THE KINTAMPO HEALTH CENTRE?

   1.
   2.
   3.
   4.
   5.

10. WHAT IMPROVEMENTS WILL MAKE YOU CONTINUE TO USE THE KINTAMPO HEALTH CENTRE?

    1.
    2.
    3.
    4.
    5.

11. WHY DID YOU NOT USE THE HEALTH CENTRE?

    1.
    2.
    3.
    4.
    5.
12. WHAT WILL MAKE YOU USE THE KINTAMPO HEALTH CENTRE? (PROMPT)

1.
2.
3.
4.
5.

13. ASSUMING YOU OR ANY MEMBER OF YOUR HOUSEHOLD IS SICK, WILL YOU USE THE KINTAMPO HEALTH CENTRE?  1. YES  2. NO

If Yes, give reasons 1
2
3
4
5

If No, give reasons 1
2
3
4
5
REFERENCE


