THE IMPACT OF USER FEES ON UTILISATION OF HEALTH CARE FACILITIES IN GHANA; A CASE STUDY OF THE TEMA DISTRICT

BY

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AUGUST 2002
I, Nancy Mavis Frye, declare that this thesis was written by me, and the ideas expressed in it are entirely mine except for references that have been duly cited. No part of this work has ever been presented anywhere for the award of a degree.

Signed: Nancy Mavis Frye

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(Supervisor)

Dr. H. E. Jackson
(Supervisor)

Dr. Y. Asante
(Supervisor)
DEDICATION

To my mother Mrs. Elizabeth Dedewayo Frye

And

My grandmother Madam Emelia D. Bamfro
ACKNOWLEDGEMENT

My greatest appreciation goes to the Almighty Lord of hosts who is still in control and who provided the grace for me to go through this course.

I am also grateful and appreciate my supervisors; Mr. G. Kwaku Tsikata, Dr. Henry E. Jackson and Dr. Yaw Asante without whose supervision I would not have completed this work. I also thank my former Head of Department Professor Baah-Nuakoh for the encouragement I received before and in the course of my studies.

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I salute the members of my family for understanding the need to further my education.

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God richly bless you all.
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<td>International Monetary Fund</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>POW</td>
<td>Programme of Work</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations International Children’s Education Fund</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>LI</td>
<td>Legislative Instrument</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>DALYs</td>
<td>Disability Adjusted Life Years</td>
</tr>
<tr>
<td>WTP</td>
<td>Willingness to Pay</td>
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<tr>
<td>CV</td>
<td>Contingent Valuation</td>
</tr>
<tr>
<td>BWFU</td>
<td>Binary With Follow Up</td>
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<tr>
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<td>Dangme West District Assembly</td>
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<td>AMA</td>
<td>Accra Metropolitan Assembly</td>
</tr>
<tr>
<td>GDA</td>
<td>Ga District Assembly</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Acquired Immuned Deficiency Syndrome</td>
</tr>
<tr>
<td>KRHC</td>
<td>Kpone Rural Health Centre</td>
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<tr>
<td>MRHC</td>
<td>Manhean Rural Health Centre</td>
</tr>
<tr>
<td>TPC</td>
<td>Tema Polyclinic</td>
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<tr>
<td>TGH</td>
<td>Tema General Hospital</td>
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ABSTRACT

User fees have been in place since 1985 and have over the years generated a lot of debates and arguments in Ghana. This study aimed to investigate the impact of cost sharing policies, otherwise known as user fees on the utilisation of health care facilities in the Tema District of the Greater Accra Region of Ghana. Other issues such as how households rank other available alternatives to public health facilities, households’ views on the user fees concept, the effectiveness of the exemption scheme as far as patients are concerned and the impact of fees on hospitals were also investigated. Qualitative research techniques were used to investigate the behavior of patients after the introduction of these policies. Different questionnaires were administered to patients who were using the health facilities as well as those who were not using the hospitals at the time of the study. In-depth interviews of health workers were also used for the purposes of the study.

The findings of the study indicate that though patients claim that fees are a bit too expensive for their pockets, there have not been decreases in utilisation levels after all. Exemption policies were non-existent as far as patients were concerned. For a greater portion of the population the drug stores are their first places of contact whenever they are ill and the drugs bought are not prescribed by any physician. This implies a considerable degree of self-medication in the district. Services and facilities at the various hospitals have improved considerably as a result of the use to which the fees are put.

The study recommends that a lot of training be given to dispensers and attendants at drug stores since they play a very major role in the health needs of the populace especially in the rural Tema. User fee exemption policies also need to be worked out well and implemented properly so that the very needy are not excluded from the use of health care facilities.
CHAPTER ONE: INTRODUCTION TO THE STUDY

1.1 Introduction

Cost sharing in the form of user fees in health care has been in existence in developing countries including those in Sub-Saharan Africa for quite a long time. Communities, families and individuals as users of these health facilities pay some of the cost of these services through user fees. In most of these countries including Ghana, user fees have been in existence before and since colonial days until the postcolonial era when various governments took over the cost of healthcare (and education) of their citizens. Ethiopia, Namibia and South Africa have also had national user fees systems for several years. For others the charges have been introduced over the past few years in both governmental and non-governmental facilities (Nolan and Turbat, 1995; Russel and Gilson, 1995). The number of countries applying fees has increased considerably since the early 1980s. Out of fifteen African countries Russel and Gilson (1995) surveyed, fourteen had some fees of some form in governmental facilities. Van Adams and Hartnett in a 1995 survey mentioned that thirty-four out of thirty seven African countries surveyed have fees of some kind for government-provided health services.

In the aftermath of the worldwide economic recession of the late 1970s and early 1980s, many countries had to introduce structural adjustment programmes aimed at creating a liberal socio-economic and political environment and also to reduce government spending on social services. User fees were introduced, re-introduced or increased in various countries. By that time it had become clear that governments especially those in developing countries could no longer continue to offer free medical care anymore. This was because for Sub-Saharan countries, the average growth rate in GDP (gross domestic product) fell from 6.1% between 1961 and 1973 to 4.3% between 1974 and 1980. More than twenty-four countries
recorded negative growth rates since the increase in per capita GDP could not be matched by the increases in population growth rates. Expenditures to the health sector kept on decreasing in most developing countries. In Lesotho for instance, the government spent 5.4% of its GNP (gross national product) on the health sector in 1990 compared to 8% in 1972. In Kenya 5.4% was spent in 1990 as against 7.9% in 1972.

In Ghana there was a fall in government expenditure to the health sector from 6.45% of the budget and 0.95% of GDP in 1980 to 4.38% and 0.35% respectively in 1983. According to an observation by the World Bank in 1995, public recurrent expenditures on health suggested a generally regressive pattern. Even with this, there was inequity in terms of rural-urban distribution. Between 1989 and 1992, there was a 6.7% increase in public recurrent expenditure on urban health (from 42% in 1989 to 48.7% in 1992) as against a decrease of 7.3% in that to the rural areas (from 58.0% to 51.3%). It therefore became necessary that the central government's role as the main financier and provider of health services in Ghana be changed.

This was because the government could no longer finance the needs of the health sector since it had very limited resources to meet its numerous demands like settling conflicts and maintaining the military among other things. It had no choice than to resort to borrowing from the International Monetary Fund (IMF) and the World Bank.

These two institutions (IMF and World Bank) came to a realisation that the governments of developing countries were spending too much of their budget allocations on financing the social sectors and this was seen as an anti-growth venture. The World Bank and the IMF as a precondition for countries that sought financial assistance from them advocated user fees. The justification for this was to raise revenue from users to supplement governments’ efforts, increase efficiency and to promote equity as outlined in its 1987 Agenda for Reform. In that same policy paper, the Bank introduced the idea of insurance and other risk-pooling
mechanisms, the encouragement of non-governmental organizations as service providers and the decentralization of government health services.

In its "World Development Report" (1993), the Bank discussed user fees in the context of how to finance national packages of essential public health and clinical services especially for the poor so that equity and allocative efficiency will be improved. The highlight was on the role that user fees could play in improving the quality of services if these fees were retained at the local level and used to ensure, for example, the availability of drugs and other supplies.

In "Better Health in Africa: Experience and Lessons Learned" (1994a), The World Bank supported user fees as part of a series of measures to finance basic health care in an environment of severe fiscal constraint.

1.2 THE RESEARCH PROBLEM

The concept of user fees has generated a lot of controversy over the past few years of its existence.

A couple of researchers have found from their researches that user fees have had and continue to have a negative impact on the poor and has rendered services out of their reach. According to their findings, increasing user fees have resulted in a decline in the utilisation of health facilities. Among them are Shulman et al, De Bethune et al (1989), Mwabu et al (1996), Waddington and Enyimayew (1989), Knauth (1991), Biritwum (1993) and Asenso-Okyere (1995)
The World Bank and a few other researchers on the other hand have noted that quality, and not price increases, were responsible for the decline in utilisation levels. Junker (1993) is among this group.¹

Most of these empirical studies done on the impact of user fees on utilisation of health care facilities or on the behaviour of people look at the factors affecting the demand for those facilities (more especially prices) and compare pre and post- fees utilisation levels (Nolan & Turbat, 1995). It is however necessary that in addition to this, attention be paid to the other alternatives available to those sections of the population that are excluded from the use of facilities by the introduction of user fees.

The effects of cost sharing are therefore ambiguous and need further investigation. This ambiguity has led to a number of controversies as to the effect these fees have on the poor. The main issues are whether the price increases make the poor people stop using the facilities altogether, have incomplete treatment, delayed treatment or resort to traditional healers, other private providers or even to self-medication. The impact of fees on utilisation may become progressively more negative as the price increases.

In Ghana, the ruling party in its campaign prior to the December 2000 elections made mention of its desire to abolish the cash and carry system which is part of the user fees concept and, as an alternative, set up the national insurance scheme. The argument was that it was having a very negative effect on the poor in terms of their health needs.

The aims of this research are to look at the user fee system and for that matter the “cash and carry” system, find out its strengths and weaknesses and to make recommendations where necessary as to whether it should be abolished or maintained making a few changes

¹Refer to chapter three for details
where necessary. As stated above, the other alternatives available to users of health care facilities will be looked at

1.3 OBJECTIVES OF THIS STUDY

The main issue here in this study is to find out the impact of these fees on utilisation levels in the Tema District. The central issue is to find out if charges make poor people stop using the modern health facilities and resort to traditional healers and/or self-medication among other alternatives. The exemption systems put in place to protect the vulnerable groups will also be investigated to see if it is working and if it has any impact on utilisation of modern health services.

Specifically the study will look at

- The trend of utilisation levels (that is whether it is increasing, decreasing or the same) after the introduction of the fees.
- How households rank the other available alternatives to public health facilities.
- Households’ views on user fees and on the proposed national health insurance scheme.
- Exemption systems and whether they are really in place as well as their influence on utilisation of health services.
- Whether the hospitals are benefiting from the fees in any way.

1.4 SIGNIFICANCE OF THE STUDY

Health as defined by the WHO (1993) refers to a state of complete physical, mental and social well being of an individual, family or community and not just the mere absence of diseases or infirmities.
There is a positive relationship between health and growth in the sense that economic growth will be expected to contribute to better health and better health to contribute to economic growth.

There is therefore the need for the government of Ghana to take the issues of developing human capital seriously if it aims at moving the country to a middle-income earning status (Vision 2020). In the words of the World Bank, “even with the best of economic policies, rapid economic growth will not be feasible unless Ghana invests more and more effectively in human capital.”

It is therefore necessary that every policy that affects the social sectors of the economy, especially health (since it cuts across every other sector of the economy) is examined critically, its strengths and weaknesses found and recommendations be made and that is what this study seeks to do.

It is hoped that the recommendations made based on the findings of this study will help the Ministry of Health in promoting the health needs and if possible review its health policies concerning the Tema District.

1.5 ORGANISATION OF THE STUDY

The rest of the thesis is organised into five chapters.

Chapter two takes a look at the background of user fees since independence was attained in 1957. A brief discussion about various health sector reforms and providers of health care in the country is also done. Chapter three gives a review of the literature and some of the studies done in the area of health economics regarding utilisation of health services. A brief conceptual framework for assessing the issues concerning user fees and its impact on utilisation starts the chapter. Chapter four deals with the methodology used to achieve the objectives of the study. It also contains the description of data sources and the study areas.
The results of the study are presented in chapter five while the analysis and conclusions of the study as well as policy recommendations and the limitations of the study are presented in chapter six.
CHAPTER TWO

2.1 BACKGROUND OF USER FEES IN GHANA

Ghana like most African countries at independence inherited a health system that was limited in access as well as in scope. The health system was not only urban based but also hospital and curative based. This was because the provision of health services in the colonial era was restricted to the whites, their dependants and only a few Ghanaians working with the white colonial masters. Healthcare facilities were therefore available only to urban dwellers while the rural folks were ignored.

At independence in 1957, the Government of Ghana took upon itself the full financing of the healthcare needs of its citizens. The Ghana Medium Term Health Strategies and 5-Year Programme of Work focused on promoting good health for all in Ghana and enhancing geographical and financial access to services.

In 1969, however, the government of the second republic abolished all medical care privileges enjoyed by public servants. Consequently, medical fees were re-introduced with the enactment of the Hospital Fee Decree, 1969 (NLCD 360). This Act introduced nominal user fees as a form of partial cost recovery in the public sector.

This was later amended as the Hospital Fees Act 325, 1971 (Nyonator, 1991). The rationale was to reduce excess demand that was believed to be due to irrational use of services in the system (Knauth, 1990) and to contribute to the cost of curative care.

In the 1972-73-budget statement of Ghana, it was stated that health constituted approximately 24% of total government budget. The Minister of Finance also noted that “the rate at which this is growing will make it difficult for government to continue providing free
medical services indefinitely without seriously impairing development effort in other sectors. Consequently government is studying the possibility of introducing a health insurance scheme for all Ghanaians.”

User fees those days were so low that only a minimal percentage of total costs were recovered (Waddington and Enyimayew, 1989). This means that until 1883, Ghana’s health system was financed mainly out of national budget.

The decreasing financial resources from the government coffers to the health sector decreased the amounts of drugs and medical supplies to the health sector, personnel training were low, salaries of health personnel were low and there was no expansion of the health facilities. The health delivery system and the distribution of existing social infrastructure were inadequate and discriminatory. The road system was poor and the lack of a fleet of vehicles in good conditions made the distribution of the few supplies to the rural areas difficult. Even in 1990 (years after charges had been imposed), government health facilities that accounted for 70% of the entire health service delivery system in the country catered for an estimated 30-40% of Ghana’s population (UNICEF, 1991). Thus the quality of services received from and access to the public health facilities were adversely affected. The statistics have long been sent to the archives and cannot be easily retrieved, but according to the Officer-In-Charge of medical services at the Tema District, Dr. Kubadjie who was in the system at the time, very high rates of preventable diseases and high death rates were recorded. Communicable diseases, environmental problems, maternal and child health problems including nutrition could not be handled due to the contraction in health services. Diseases such as yellow fever and yaws, which had been eradicated years earlier, reappeared with epidemics in the Northern and Upper Regions. Infant mortality, which was 80 per 1000 in the 1970s rose to between 110 and 120 per 1000 by 1983-4. The child death rate (age 1-4) is estimated to have doubled from 15 per 1000 in the 1970s to 30 per 1000 in 1983-4, higher than the rate in 1960 (UNICEF, 1986). Supply of basic life saving drugs were
limited and simple cases like asthma could not be treated at government clinics. Drugs such as nivaquine and aspirin and consumables like cotton wool, gauze, bandages and needles were in short supply. The hospitals were in a deplorable state, which left nurses and patients at the mercy of the rain and sun. To make matters worse the harsh economic conditions resulted in an exodus of manpower, which worsened an already inadequate distribution of health personnel.

Because of these problems, patients had to buy prescribed drugs from private pharmacies, there was inadequate transport facilities for supervision of health services, maintenance of facilities were poor and there was virtually no motivation for health staff (Goodman & Waddington, 1993; Smith, 1993). Old equipments in the health institution could not be repaired due to lack of imported spare parts.

Dr. Moses Adibo, the Health Minister at that time proposed that a cost recovery scheme be properly designed and efficiently implemented so as to generate enough revenue to support at least, in part, the most important drugs and supplies. The main objective was to collect enough money to make importation of drugs much easier, hence the need to recover full cost of drugs.

The World Bank and the IMF as a pre-condition for countries that sought financial assistance from them advocated this concept of user fees. These countries were asked to cut down their spending on social sectors including the health and education sectors in their economies. The justification for this was to raise revenue, increase efficiency and promote equity.
Table 2.1  Trends In Health Expenditures: 1980 -1999

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Health Expenditure £m</th>
<th>Recurrent Health Expenditure/GDP Ratio</th>
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Source: Government of Ghana, Annual Budget Statements, Various Issue and Author’s own calculations

2.2 Health Sector Reforms

Reform in Ghana’s health center came as part of structural adjustment and public service reform programs running through the 1980s and 1990s. User fees, full cost recovery of drugs, giving autonomy to tertiary and teaching hospitals, restructuring and strengthening health organisation and management at district and central levels and the legislation for the creation of a Ghana Health Service are all part of the reform package. Notable among the
reforms is the abolishing of feeding in hospitals and the redeployment of non-technical staff. The Ministry of Health staff was reduced from 38,000 to 27,000 starting from 1987 (Dovlo, 1998). The aims of the reforms were to enhance equity, efficiency, and accessibility and to improve quality of service. They also aimed at improving the capacity for policy development, strengthening intersectoral collaboration and establishing performance monitoring and regulation (MOH, 1997). Thus Ghana started addressing issues of equity in health care by expanding the number of health facilities to cover the rural areas.

The focus was mainly towards basic clinical and preventive services. Before then the statistics had indicated that people in the southern part of Ghana had access to health facilities more than those in the north. Also health facilities were relatively scarce in the rural areas as compared to the urban areas. Majority of rural people had to travel 5 miles and even sometimes 9 miles just to have access to a health facility (Ekey, 1997). The north, which had a population of 4 million people, has 20% of the total health personnel. The rest are in the south. One thousand doctors were providing services for the 12 million people in the south as against 64 in the north. Even in the south, 50% of these doctors are in the capital of the country (Dovlo, 1998). Out of 537 doctors at the district levels, 111 doctors are found in Accra district alone. The ratio of doctor to nurse is 1:13 in southern Ghana and 1:23 in the north (Avle and Ekey, 1999).

The “Health Sector 5-Year Programme of Work” (POW), (MOH 1996) is a Medium Term Health Strategy Document developed in 1995 to guide health development in Ghana between 1997-2001. Its overall objective is to improve the health status of Ghanaians. The “POW” is based on “Vision 2020” whose main objective is to “increase access to health services especially in rural areas”. Generally its aim was to improve the overall performance of the health sector and more importantly increase geographical and financial access.
2.3 User Fees

The increase in the cost of medical care in Ghana is the result of changes in The Health care Financing Scheme introduced under the Hospital Fees Legislation (1985) and the “Cash and Carry” system which began in 1992. Under these two policies, subsidies were removed and patients were required to pay partly for consultations and diagnostic procedures and fully for drugs supplied. (Asenso-Okyere et al, 1998). Vaccinations and the treatment of certain diseases like leprosy and tuberculosis were excluded (Waddington and Enyimayew, 1989).

In 1988 modifications were made to the Hospital Fees Act, which included the supply of drugs at full cost to patients. Provision was also made for health facilities to retain increasing proportions of their revenue. In 1989 institutions were authorised to keep 100% of fees collected to facilitate capitalisation for the proposed cash-and-carry system for drug purchases. The “cash-and-carry” system involved the payment of fees for drugs to cover full costs of drugs made up of the procurement cost of the product and a percentage mark-up levied by the central and regional medical stores. Through the cash and carry policy, public health facilities can finance drug purchases for their hospitals and clinics under a revolving drug scheme (Asenso-Okyere et al, 1998). Pharmacies at the health facilities required payments for drugs to be made by patients before the drugs are given to them.

Revenue realised are kept in two separate accounts: one solely for the purchase of drugs in order to ensure that there is always an unlimited supply of drugs and the other accounts is used solely at the discretion of the manager of the local facility to improve the quality of care provided. In the case of the Ashanti-Akim District as stated by Waddington and Enyimayew (1989), part of the money retained was used to buy lanterns, benches and buckets among other things to improve upon the quality of services provided.
Fees were set in ascending order starting with rural health posts and health centres, urban health centers, district hospitals, regional hospitals and ending with teaching hospitals. Prices were set using the following criteria: service level, treatment location, age, nationality, and service (whether curative or preventive, type of disease and type of procedure). Children paid between 50% and 67% of what adults paid depending on the service level and location. Non-Ghanaians paid fees, which ranged from 133% to 267% of those paid by Ghanaians (Asenso-Okyere, 1995).

It must be mentioned that as at the time government’s charges for the use of public services began in 1971 with the Hospital Fee Act 325, mission hospitals had already been charging for medical services for decades.

2.3.1 Definition of Terms

User fees broadly defined, include: cash payments for services; in-kind contributions such as materials or labour for construction of clinics (or schools in the case of education); pre-payment or insurance schemes; and illicit fees that users sometimes have to pay, for example, tipping someone to see a doctor.

There is a need to state that the following concepts that have been used in the various literature, publications and papers interchangeably have slight differences in their definitions.

Community financing refers to contributions to costs in cash or in kind made by users and non-users; not based on assessments of individual consumption and involving community co-management.

Cost recovery constitutes contributions to costs by users in cash rather than in kind or labour that can be made on an individual basis or by a group of users and are not necessarily assessed per unit of services delivered.
Cost sharing refers to contributions to costs by users in kind or in labour rather than in cash, that can be made on an individual basis or by a group of users and are not necessarily assessed per unit of service delivered.

“Cash and carry” system involves the payment of fees for drugs to cover full cost of drugs made up of the procurement cost of the product and a percentage mark-up levied by the central and regional medical stores.

For the purposes of this study, quality will be defined in terms of the availability of qualified health personnel, essential drugs and health equipment (like laboratories, x-ray machines, ambulances and staff attitudes).

There are many variables that can be used as a measure of efficiency. In this study the measure will be restricted to time spent when receiving treatment at the health facilities and the proper use of the referral system. The inefficiency issue lies in the fact that waiting to receive health care constitutes a non-optimal use of time (Tsikata and Iddrissu, 2001).

2.4 Benefits of User Fees

a) The rationale for introducing fees was to mobilise resources to supplement government’s contributions so as to improve the quality of services provided. This was because the government had cut down considerably on its spending in the social sectors.

Shaw (1996) reports that about one third of the 27 Sub-Saharan African countries with some kind of national system of user fees in place see revenue mobilisation as their primary
objective. Two-thirds emphasise improvements in Primary Health Services such as staff incentives or drug availability as their primary objective of introducing fees.

b) There was also the need to increase access to and utilisation of health care facilities. It also aimed at redeploying excess staff and rehabilitating the available facilities.

c) It also gives local providers autonomy over use of funds retained at those levels. This has encouraged revolving drug funds in many countries including Ghana.

User fees are beneficial to consumers too.

d) According to the World Bank (1987) policy study, “consumers will be more sensible in their demand for services”. What this means is that it aimed at encouraging users to become more responsible for their own health care by sharing in the cost of the services they received (Quick and Musau, 1994).

e) Providers on the other hand will have the incentive to improve upon the quality of services being provided since the consumers are paying for these. Thus increases in user fees will be matched by increases in quality of services. Pilferage, spoilage and over prescription of drugs will also be curtailed.

f) Griffin (1987) mentioned that the pattern of demand in the presence of charges would convey more information to planners about how patients value different services and that is a useful input to investment decisions.
g) From Vogel’s 1991 survey, it was mentioned that a proportion of fees collected would be retained at the facility, as a source of incentive to collect fees and to improve the quality of care there.

h) When different charges are imposed for the various different services, a proper use of the referral system will be ensured. Patients will be compelled to make use of preventive and primary health care facilities, that is send minor cases to health posts, clinics, dispensaries, etc (whichever is nearer to them) where charges are lower rather than to the hospitals where charges are higher.

i) Other international analysts (Griffin, 1992; Shaw and Griffin, 1995; World Bank, 1987, 1993) have also suggested that using revenues from user fees to improve the quality of services will generate efficiency and equity gains through their impact on utilisation. When prices are zero or uniformly low across a health care system and include the most expensive hospital services and the least expensive immunisations, consumers tend not to pay attention to costs (Griffin, 1988). They may converge on the most expensive facilities and use the most sophisticated services even when afflicted with relatively minor problems. Price signals can serve as fair warning that people who choose to bypass the referral system and head directly for more costly hospitals should be prepared to pay the entire cost of service (Shaw and Griffin, 1995). They continued by explaining that assuming people bypass quality services at clinics for higher priced services at hospitals, a more severe requirement would be to charge even more than 100% of costs and use the proceeds to cross-subsidise services at the health centres for those least able to pay.
Shaw and Griffin (1995) noted that referral systems do not work well in many African countries. A World Bank survey of 38 African countries revealed that only a few Anglophone and Francophone countries that utilise cost recovery schemes have structured their fees to promote appropriate use (Nolan and Turbat, 1993). However while some countries have employed user charges to foster efficiency related objectives, such as discouraging unnecessary use and preventing by passing of lower level facilities, only one of the countries surveyed by Nolan and Turbat (1995) explicitly identified improving equity as an objective.

j) On equity issues Shaw and Griffin (1995) mentioned that user fees in public health facilities help to promote equity because the demand for health care rises disproportionately with income. People who are more well off are more willing to pay for costly services, so charging wealthier people for services they demand and can afford-particularly at hospitals-and pooling those revenues to subsidise those least able to afford care is a way to improve health care delivery to the poor.

Since recent cuts in budgetary allocations to the health facilities result in drug shortages, late payments of staff salaries, poor maintenance and purchase of equipment, user fees are more likely to foster equity when some portions are retained at the point of collection especially at the local health facilities. This boost in local revenues is likely to improve the quality of care of the relatively poor households in rural or remote areas (Shaw and Griffin, 1995). This has been proven to be working in Cameroon Central African Republic, Swaziland and in Kenya.

k) High user fees can in public facilities can help to stimulate the development of insurance and a robust private sector that is independent of the public system (Shaw and Griffin, 1995). When fees charged at the urban areas are high in
addition to the charges by private providers, people will be encouraged to 
insure themselves resulting in a boost for insurance companies.

2.5 Effects on Household Economy

Fees have three types of effects on the household economy;

- Those arising from changes in the financial and non-financial costs of using 
  health facilities or services.
- The loss of future income and time for unpaid work due to the deterioration in 
  health status associated with reduced utilisation
- The benefits of higher quality services in terms of the improved health status of 
  users and the associated welfare benefits.

If the quality of health services improves significantly, the welfare of household 
whose utilisation is not reduced by user fees is likely to fall only slightly and may improve 
if long-term benefits of improved treatment outweigh the increased financial costs. 
However households whose utilisation is reduced by user fees may well lose 
substantially because the potential cost of ill health to the household economy is 
considerable. They lose in the areas of loss of earnings due to time off work while ill and 
their wage rates may also be lower for those whose health status is worse. Over the long 
term, the loss of income will compound the deterioration in the health status of 
household members, through its effects on nutrition, environment, risk factors, etc, as 
well as its direct welfare effects.

For low-income households, meeting increased costs will require a greater proportional 
reduction in expenditure on other goods. At very low-income levels, even a very small 
reduction in expenditure may have a very substantial negative impact on welfare (and 
health status). This applies particularly in rural areas in some low-income countries,
where subsistence production represents a large proportion of consumption, and money income is limited (An example is Rwanda where 92% of the population is engaged in agriculture and about 75% of agriculture proportion is for subsistence).

The sources of funds to pay for user charges may also have welfare implications. For some households the response is either to reduce expenditure or to increase income (by increasing working hours). This impact is direct and immediate compared to less obvious effects like through nutrition, reduced time for unpaid household work, etc. Where the response is to draw on savings, the impact may be less obvious (example seasonal fluctuations in income or forgone investments in future production). In cases where costs are financed by borrowing (including for example pre-harvest sales of crops as done in low income countries and communities), there may be reduction in future consumption. The long-term effect may be bigger if borrowing takes place at high interest rates, as is the case for low-income households, whose access to credit is generally limited. This situation is likely to arise most often in the case of high cost treatment, for example in hospitals. This means that it is useful to investigate the sources of funds used to pay for health care.

2.6 Exemption Policies in Ghana

In view of the anticipated possible effects user fees were likely to have on the poor, provisions were made to exempt some categories of users of public health facilities. This provision was made under the Legislative Instrument (L I) 1313 of the Hospital Fees Regulation of 1985. These people were excluded by reason of poverty or their inability to pay (paupers). The extent of this is unknown but it is assumed that many people have difficulty in paying since according to estimates 35% of Ghanaians live below the poverty line.
2.6.1 The Categories Exempted

These included the following:

- Refugees
- The poor (paupers)
- Children under five years
- Pregnant women (except for hospital accommodation and catering charges, antenatal and postnatal care were to be free)
- Disabled people
- Elderly people aged seventy years and above
- Health service personnel and their dependants
- Patients suffering from leprosy, tuberculosis and psychiatric patients.

2.6.2 Problems with Exemptions

There is a problem when it comes to identifying the poor since there is nothing to detect it. Because of this difficulty in identification, the abuse by users who cannot be described as poor and problems of obtaining refunds from the government, exemption policies are hardly adhered to.

In the Volta Region, Nyonator and Kutzin found out that exemptions were virtually non-existent. Less than 1 percent of the 1000 people contacted were granted exemptions in 1995. Looking at the number of people living under the poverty line, they concluded that user fees were preventing the poor from the use of medical facilities (Tsikata and Iddrissu, 2001).

This problem is however not peculiar to Ghana alone. Shaw (1996) reported that of 25 countries in Sub-Saharan Africa, only one has an official income ceiling below which people are exempt, 14 have exemptions that are part of a national health policy but are without any clear criteria; the remaining 10 countries provide exemptions as part of local projects or
facilities, with an ad hoc or community-by-community basis (Asenso-Okyere et al, 1998). The general identification processes in Sub-Saharan Africa is mainly discretionary and have therefore been exploited by certain officials in some countries (Tsikata and Iddrisu, 2001).

2.7 Health Care Providers in Ghana.

There are several providers in Ghana. These include

- The central government,
- Local government and quasi-public,
- Private physicians,
- Traditional practitioners,
- Non-profit/voluntary,
- Religious organisations,
- Employers,
- Communities,
- Pharmacies,
- Laboratories

2.7.1 Government

The Ministry of Health remains the largest provider of health services in Ghana. It owns 63% of hospitals and 70% of all hospital beds in the country. In spite of the Structural Adjustment Programme that made the government cut its expenditures to the health sectors, the expenditures of the Ministry of Health grew by 12% in real terms from 1986 to 1990. There is a great inequality when it comes to access in rural and urban areas. Most of the Ministry of Health budget is targeted towards the hospital-based curative care in the urban areas where only 30% of the total population lives. The Primary Health Care Programme which mostly benefits the rural people, normally receives about 20% of the government’s health budget (Asenso-Okyere, 1995) even though the greater part of the population live in the rural area.
The Korle-Bu Teaching Hospital in Accra, the Komfo Anokye Teaching Hospital in Kumasi, the Ridge Hospital, 37 Military Hospital, Police Hospital and all other regional and district hospitals are owned by the government.

2.7.2 Private Orthodox Medical Practitioners

The contributions of these private medical practitioners to the health service delivery are substantial in Ghana. Almost half of all visits to health facilities take place within the private sector (MOH 1996). These private orthodox medical practitioners (doctors, midwives and nurses) whose practices are oriented towards curative and obstetric care operate mainly in urban areas. It is estimated that approximately 30% of all Ghanaian doctors work in private practice. Users pay for all the services they receive from here, the markets operate freely and these fees vary from facility to facility. Normally, charges at these facilities are beyond the reach of most Ghanaians. This is because there is no regulation as to the money these private facilities charge. This explains why most of these facilities are located in urban areas where incomes are generally high.

2.7.3 Mission Hospitals

The mission hospitals and clinics charge user fees to cover recurrent expenditures and they pass on the full cost of drugs to users (Asenso-Okyere, 1995). They provide quality service so people are willing to pay. The poor are exempted. Exemptions here do not pose identification problems since in the rural areas where these mission hospitals are located, it is easy to identify the poor. Some of such hospitals that were in the hands of the missions until quite recently when the government took over are the Agogo Hospital and the Atibie Hospital in the Ashanti and Eastern regions respectively.
2.7.4 Traditional Healers

Traditional healers/practitioners are found mostly in the rural areas where orthodox practitioners are mostly absent. They are spread widely across the country and provide easy access for this kind of care for the vast majority of the population. They use herbs and fetishes to cure diseases. The belief that most diseases have supernatural causes and can be cured only by these traditional healers makes them very important in the rural areas. Their charges vary considerably. According to Asenso-Okyere (1995), it may depend on the patient's apparent access to money, how well he or she is known, the supposed cause of the disease (supernatural or natural) and the length of time needed for treatment. There is usually an initial access fee, which may be fixed, or a token gift.

Treatments here can be expensive at times because in the cause of treatment patients can be asked to present goats, drinks, fowls, eggs among others, but credit arrangements can be made. This makes people have access to traditional healers at all times.

The activities of traditional healers can be problematic at times. Their herbal preparations are sometimes produced under very unhygienic conditions and have no specific dosages. Two different healers for the same ailment can prepare different herbs. In the same way, one preparation may also be said to heal several ailments. These may lead to complications and have therefore raised concerns.

To arrest the above problems and to improve the services of these traditional healers, they have been integrated into the orthodox medical services. Ghana established a center for research into plant medicine in the early 1970s and introduced a practice whereby a team of doctors and traditional healers diagnosed diseases and prescribed medicine. This could either be a pharmaceutical drug or herbal preparation. This collaboration between orthodox and traditional healers however collapsed after the doctors who were interested in it left the
system. The Ministry of Health has established a unit in charge of herbal medicine as a step towards recognising traditional medicine in Ghana. These healers have been organised and registered with various district health management teams so that some training can be organised for them. There are also plans for consensus-building programmes among the orthodox practitioners (doctors) to recognise the complimentary role traditional healers play in the provision of health care.

2.7.5 Traditional Birth Attendants

Traditional birth attendants offer delivery services in the rural areas where modern facilities are absent. The Ministry of Health has trained these attendants in order to reduce child and maternal mortality rates. They are given courses in modern child delivery hygiene, nutrition, family planning, and prenatal care and child welfare. The Ministry plans to expand the training programme so that most of the existing traditional birth attendants can benefit from it (Asenso-Okyere, 1995).

2.8 USER FEES IN THE TEMA DISTRICT

The Tema District like all the other areas in Ghana has been charging fees since the mid 1980s (1985) when the fees were introduced into the health sector. The case of the Tema Polyclinic is a bit different in the sense that the charging of fees began in 1983 when it became very necessary for the clinic to raise some extra resources to run the place.

Fees cover every area of the centers (inpatient, outpatient and corporate bodies who use the places). Different departments have different charges and even at one department, different charges could be made depending on the nature of services needed. For instance a minor operation like Cornel Foreign Body Removal costs six thousand cedis while another one like Pterigium Excision costs twenty thousand cedis at the same operation theatre.
Revenue collectors at the various facilities are responsible for the collection of these. All the monies collected belong to the government but the centers are asked to keep them and account for them. All monies are banked intact and taken out by cheque when needed.

Monies collected are kept in two separate accounts just like it is done in every district in Ghana. The first known as the management committee account is used to run the centers. Monies from these accounts are used at the discretion of the various officers-in-charge to take care of maintenance works, renovations and stationery. The second account known as the revolving drug fund is solely for the purchase of drugs.

There is no documented record of the state in which the hospitals were in those periods preceding the introduction of fees except what health workers and elderly users have to say. According to almost all the officers-in-charge, the facilities in the district were in very bad shape; roofs were leaking leaving patients and nurses at the mercy of the rain and sun, basic essential life-saving drugs were unavailable, monies from the Ministry of Health were not flowing regularly making working conditions at the facilities very difficult. On the part of patients, drugs (especially antibiotics) were being misused because they were obtained at no cost. Patients were throwing these drugs away without using them. Last but not the least, there were high rates of preventable diseases that resulted in high death rates.
CHAPTER THREE: LITERATURE REVIEW

3.1 CONCEPTUAL FRAMEWORK

3.1.1 Concepts of User Fees

The concept of user fees belongs to a social welfare maximization economics that in turn is based on efficiency and equity considerations (Tsikata and Iddrissu, 2001). The equity consideration is however debatable because when you take a given number of people using a particular health facility you will realize that incomes are unequally distributed among them. Meanwhile these different income group earners pay the same fees for the same services. This makes services inaccessible to the poor. Borne et al (1994) based on this, explained that increasing user fees in public health services will lead to serious inequality of access so that those at highest risk of ill-health and death are pushed out of the formal health system.

There are two different views on the concept of user fees.

The proponents argue that demand for a health service is inelastic to its price and income so that increased user fee would result in a non-significant decline in demand for services. This leaves room to increase or implement user fees on a wider scale. The World Bank is part of this group. Assuming individuals are able and willing to pay for health care that benefits them, the Bank argues that fees should be targeted at curative and drugs in particular because their benefits are easily associated with their monetary value. Therefore charging patients will generate substantial additional funds while at the same time eliminating the inefficiencies of free care such as excessive utilisation. Evidences from Sudan support this claim. When fees were increased by 150% (associated by improvements in quality) demand patterns showed that it was inelastic to price.

The opponents on the other hand argue that demand for health services is highly sensitive to price levels so that a marginal increase in price is accompanied by a huge decline in the use
of health services (Ngugi, 1999). According to this group of people, fees deny access to those who need medical care most (the poor). In their view, economic hardships prevent majority of the population from paying fees so the objective of user fees raising funds for the public health sector is unlikely to be achieved. After fees were introduced in Tanzania it was realised that 84% and 81% of rural and urban dwellers respectively did not have enough money to pay.

3.1.2 Concepts of Quality

The World Bank (1987) and a number of scholars have argued in the past that quality and not price is the crucial factor influencing the demand for health care in developing countries. To these people (including Nolan and Turbat, 1995), even with a significant negative price effect, there can well be an increase in demand when fees are imposed or increased owing to the positive impact of improved quality if the revenue from user fees is used to improve the service provided.

There is no universally agreed upon definition of quality. Different studies use different indicators as a measure of quality. Studies done by Heller (1982), Akin and others (1985) used availability of a physician at the health facility as a measure of quality. Denton and others (1991) used expenditures per person in the population as an index of physical conditions at the facility and the availability of drugs as an indicator of quality. Litvack and Bodart (1993) defined quality of care as having essential drugs available.

Donabedian (1966) defined quality of care as including the assessment of structure, process and outcome.
3.2 THEORETICAL FRAMEWORK.

Grossman (1972a, 1972b) postulated that individuals endeavour to maximize satisfaction from the consumption of goods and services including health care given their resource constraints.

\[
\text{Max } U = U(M, HS, C, Z) \tag{1}
\]

Where

\[
U = \text{Utility}
\]
\[
M = \text{Health care consumption}
\]
\[
HS = \text{perceived health status}
\]
\[
C = \text{other commodities}
\]
\[
Z = \text{observable socio-economic characteristics that affect health;}
\]

Utility \((U)\) is assumed to be a function of health care consumption \((M)\), perceived health status \((H)\), and other commodities \((C)\).

The individual chooses levels of \(M\) and \(C\) that maximize their utility subject to standard budget and time constraints and a health production function

Subject to \(H = H(M, C, Z, e) \tag{2}\)
\[
C + Pm = Y \tag{3}
\]
\[
C + tM = T \tag{4}
\]

Where

\(e\) = factors that are known to the individual but are not measured in the survey and therefore are unobserved by the researcher;

\(Y\) = total household income;

\(P\) = the money price of medical care;

\(T\) = the value of total time;
t= relative time price of medical care.

What (4) means is that for a given time T available to an individual, he allocates part of it to the consumption of healthcare and the other part to the consumption of other goods.

Health can be seen as both consumption and an investment good. As a pure consumption good health is desired because it makes people feel better and as a pure investment good, it increases the number of healthy days available to work and thus to earn income. In view of this, Grossman (1972a, 1972b) stated that it is not medical care per se that the consumer wants, but rather health itself. Medical care demand is a derived demand for an input to produce health. That is people want health so they demand inputs to produce it. Demand for health services is determined by health status of an individual or household (whether they need treatment), household economy (availability of financial resources and time) and the household’s perception of the quality of the services available.

$$H^D = f(HS, Y, Q^p)$$

Where

- **$H^D$** = demand for health service
- **HS** = health status
- **Y** = availability of financial resources and time
- **$Q^p$** = perceived quality

There are both direct and indirect linkages between user fees and health status. All other things being equal, the imposition of user fees is likely to reduce household’s utilisation of health services. Money realised can be used to increase the quantity, quality (perceived and technical), equity and efficiency (reducing waiting time) in health services. User fees are also likely to affect household’s economy (financial resources and time) and households’ changes in utilisation patterns can have an effect on health status especially in cases where income levels are low. Money (income) or lack of financial resources is a major factor affecting most
low-income rural areas. McPake et al (1992) in their case study areas in four out of five Sub-Saharan countries found the seasonal non-availability of cash to be a major problem affecting 90% of the population in Burundi and more than half the population in Guinea.

Utilisation decisions (which include delays in treatment, non-completion of treatment, etc and encompass all health sectors) are interpreted as a result of the interaction of demand and supply as intermediated by the pricing mechanism (Woodward, 1997). He further went on to define the demand for health services as the ability and willingness of households to meet the time and financial costs of treatment and supply as the availability of services in a particular location.

He distinguished between willingness and ability to pay, which according to him are treated as one and the same in most literature. In his view, an individual may be willing to pay for an essential service despite the fact that doing so will require cutting back on essential food intake. In such a situation we say ability to pay is low therefore the argument that even poor people have a high willingness to pay for basic social services is based on the subjective expression of the urgency of need for a particular service rather than on the true ability to pay for a service. That is poor people have a limited budget to meet multiple needs so the fact that they are willing to pay for cost of health care of a very sick relative does not necessarily mean that they are easily able to pay. Willingness to pay measures felt need for a single good while ability to pay looks at the aggregate impact on a household’s resources of a variety of needs like food, water, shelter and health care. A case in Zambia illustrates this well. A study done by Booth et al (1995) showed that the increase in user fees in 1994 resulted in a massive decline in utilisation of health facilities throughout the country. Yet a survey that took place before the price hike reported that only 4% of the households reported that they would be unable to afford higher fees for health care. (Forsby, 1993)
The pricing mechanism includes all the costs of using health services, including traveling and waiting time, informal payments for treatment and other financial costs as well as user charges.

### 3.3 Utilisation of Health Care Services.

Utilisation refers to the consumption of health care services. Health care is consumed in order to improve health status (it is a derived demand). Health care is one of the many factors that contribute to health status. It (health care) has value in exchange but not in use. This means that when an individual has money, he can seek for care from a health facility (exchanging money for healthcare), but health care in itself is not demanded except for the health it gives individuals. There is a connection between health and health status of an individual or population on one side and consumption of health care services on the other side. This connection according to Grossman is based on two relationships: the production function of health and the demand function for health care.

In the production function for health, the main question is how much health care services contribute to the production of health (preservation or improvement).

\[ H^p = h \ (HC) \]

Expectations are that higher consumption of health care services (otherwise referred to as utilisation in this study) results in better health most probably with some time lag. That is the more health care is consumed the healthier people become, but this takes place over a period of time. That is health status is an increasing function of the utilisation of health care.

Health status (HS) therefore is a function of so many things of which health care is just one.
HS = f (Health Care, Lifestyle, Environment, Human Biology)

Improvements in any of the above will shift the health status curve upwards.

In the demand function for health care services, the relationship runs from the state of health to the consumption of health care services and in the function, the state of health is the explanatory variable. The theoretical expectation is a negative relationship; worse health gives increased utilisation of health care services, that is the unhealthy one is, the more he will consume health care. On the production side health care is used to produce health. On the consumption side the state of health will influence demand for health care.

\[ H^D = h (HS) \]

Modern day health economists have however argued that the contribution of health care to health status is very marginal and that other factors such as lifestyle environment and education contribute more to health status than health care does. They have used different study designs and data sources to estimate the marginal product of health care. To get a common basis these resulting numbers were converted using the elasticity of health with respect to expenditure on health care inputs.

That is

\[ (\% \text{ Change in health})/(\% \text{ increase in health care expenditure}) \]

Each of the researchers applied econometric methods to analyze survey data ranging from statewide data (Auster et al, 1969) to data on county groups (Hadley, 1882,1988) to data on individuals (Sickles and Yazbeck, 1998). While the older studies used mortality rates as an inverse measure of health, the more recent studies used measures of activity and mobility as the measure of health.

The conclusions they came to are that health care is a statistically significant contributor to health on the margin, but that its marginal effect on health is small.
The economics of health care belongs to the neoclassical school of thought. Conventionally neoclassical economists assume that property rights over consumption decisions are vested in the consumer; the notion of a rational consumer exercising his sovereignty.

However in the utilisation of health care, much of the consumer’s sovereignty is lost or eroded due to a different distribution of property rights in decision-making than conventionally assumed in economic analysis. This is mainly due to the lack of consumer’s information (about his existing health status, of treatment availability, of treatment effectiveness, and other things). Ignorance in these important areas makes decision making about health care consumption difficult and leads to the development of “agency relationships” where doctors act as agents on behalf of and in the interests of the patients. This makes the “property rights” in decision making in health care different from that implied in the standard consumer sovereignty of the neoclassical model. The utility of health care consumption may come not just in the form of the outcome utility associated with health status changes, but also in the form of process utility associated with information and decision making.

3.4 Various Studies

In 1991, Andrew L. Creese wrote a review article “User Charges for Health Care: A Review of Recent Experience” in which he reviewed recent experiences with increases in user charges and their effect on the utilisation of health care facilities.

He distinguished static studies of utilisation from dynamic ones. In the former (which is normally referred to as cross sectional) utilisation rates are disaggregated by age and morbidity while in the latter (time-series), studies are concerned with access to changes in utilisation resulting from a policy change.
He reviewed a study done in the USA in relation to utilization of health care facilities by hypertensive patients. In that study, Shulman et al (1986) identified patterns of lower use of both medication and medical care by lower income, and higher risk patients. It was observed that low-income patients must allocate a greater portion of earnings to blood pressure control.

A study in Zaire by De Bethune et al (1989) showed that a rapid increase in the price of health care led to sharp falls in the demand for curative contacts, prenatal and under-five clinic visits. Overall utilisation rates decreased by 6% (from 37% to 31%) and prenatal contacts fell from 95% to 84%. The conclusions by the authors were that demand for health care is more elastic with respect to price among the poor than in the higher income groups. They concluded by mentioning that the amounts recovered through user fees was not as large as had been expected and that “…over-high pricing may exert an unacceptable cost in terms of service accessibility and thus very likely also in terms of equity.”

Yoder (1989) in a study in Swaziland showed a diversion from use of public facilities to mission providers when it was decided that charges be raised by between 300% and 400% at government facilities. This was unaccompanied by perceived increase in quality of care. Government facilities recorded a 32.4% drop in utilisation and mission facilities experienced a 10% increase in utilisation levels. A substantial number of patients moved away from modern medicine to unrecorded sources of care or no expressed demand. A year after the initial price changes, evidences of further declines in the level of use of government facilities was seen. The observation was that it was the poor people in the society (country) who stopped using the government health facilities. That is the poor were the worst hit.

A study by Bennett (1990) in Lesotho, which monitored the effects of increases in fees at government health facilities from July 1988 till the time of the research, concluded that particularly at the facilities on the mountains, attendance dropped appreciably immediately
after fees were increased. The trend at the lowland facilities showed that pre fees increase attendance levels would soon be attained. Attendance levels began to creep back up again just a few weeks after the increase in fees. The study was not clear about the peculiarities between the lowland and the mountainous areas. He noted that the impact was felt most on the 0-5 age group, which was seen as the most vulnerable sector of the population. In a related study overall drop in utilisation at MOH facilities at an average of about 30% was recorded with the fall in one district being over 50%. According to Byrne and Gertler (1990), only a minor switch of demand towards private health facilities was observed in the period under investigation.

The United Kingdom has in recent years introduced the concept of extending and raising the charges for certain services provided by the National Health Service. Birch (1989) in a study of that recent experience, compared exempt and non-exempt patients. He found out that for dental care, the non-exempt were four times more likely to receive emergency care only, but receive 40% less treatment. The implication is that the higher charges prevented a number of non-exempts from receiving dental care.

Mwabu et al (1995) did a study on the demand effects of user charges in a district health care system in Kenya for the period 1889-91. Among others the study sought to answer these questions; what happened to health care demand at government and non-government health facilities during the period of cost sharing, what happened to this demand when user fees were suspended, what effects did cost sharing have on revenue and on quality of care, how did health facility managers use the fee revenue they retained, what proportion of the patients was unable to afford the fees? A field study was designed in which data collected from both private and public health facilities as well as from a random sample of households in the two districts were collected and analyzed. The results showed that the introduction of fees in the public health sector increased the average cost of medical treatment in all categories of government facilities, except in dispensaries, where fees were not levied.
During that period, attendance dropped by about 50%. The government had to suspend the fees for 20 months. Seven months after the suspension of fees, attendance at government health centres increased by 41%. The suspension caused a movement of patients from the private to the government health facilities. The revenue generated by user fees covered 2.4% of the recurrent health budget. Forty percent of the facilities did not spend the fee revenue they collected because expenditure approval procedures were cumbersome.

In the study "User Fees and Patients Behaviour; Evidence from Niamey National Hospital", Weaver (1995) presented evidence on the effects of price changes on the delay before seeking care and on referral status in a sample of hospital patients in Niger. Price changes were measured as differences across patients at one hospital in whether or not they pay for care rather than as differences in prices across several hospitals. User fees are charged but exemptions are allowed for students, indigent patients and government employees. The effect of income on the delay before seeking care and referral status was also looked at. The analysis showed that user fees affected patients' behaviour, but the effects were not the same for outpatients and inpatients. Outpatients who paid for care waited longer before seeking care, but inpatients did not. Inpatients who paid for care were more likely to be referred, but outpatients were not. Patients with more income wanted less time to seek care and were less likely to be referred than other patients. Further, household consumption explained patients' behaviour better than current income.

Chalker (1995) looked at the effects on prescribing habits of a drug supply and cost sharing system in a hill district in Nepal. The inadequate yearly supply of drugs from the government was supplemented by an extra supply from the project in that district. Drugs were sold at a fixed prescription charge, which covered all drugs for one episode of illness. The prescription pattern in this district was compared to a control district with only the yearly government supply and no drug scheme. Drugs prescribed were also compared to theoretical needs based on the recorded diagnosis of the same patients and recommended treatment.
guidelines. Attendance figures were studied before and after the introduction of the drug scheme in the test district. A 25% sample of prescriptions totaling 11,772 from 22 health posts in the two districts was taken over a one year period. From the results it was seen that health workers prescribed essential drugs excessively in the drug scheme district. The doses that were prescribed in the control district were better. Utilisation of health facilities dropped by 18% in the drug scheme district and then increased in the second year. From this study we learn that the supply of essential drugs does not necessarily improve the quality of care or increase in attendance levels.

Courtois and Dumoulin (1995) stated that health centres in Idjwi District of Zaire had been self-financed through the selling of drugs since 1985. The use of the facilities was low because of the expensive costs of seeking medical care. The records showed 24 visits per year per 100 inhabitants. In 1989 the medical team tried to reduce the costs of visits by changing the prices of drugs and prescriptions. The study showed that although prescribed drug costs were stabilized compared to inflation, there was no increase in the use of medical care. The reduction in the drug profit margins reduced income for the health care institutions. This made 6 of the 8 centres record deficits in their monthly accounts. The need for health care centres to be self-financing was a major limiting factor in the use of facilities in the Idjwi district.

According to Collins et al (1996), the 1989 outpatient registration fee in Kenya led to an average reduction in utilisation of 27% at provincial hospitals, 45% at district hospitals and 33% at health centres. In contrast the phased introduction of the outpatient treatment fee beginning in 1992, combined with broader exemptions was associated with much smaller decreases in outpatient utilisation.

In Asbu’s (1999) work, “Analysis of User Fees for Health Policy in Eritrea”, his objective was to critically evaluate the content of the user fee policy with respect to its implication for
efficiency, equity, quality and utilisation of health care and to scrutinize the implication of the
scheme and identify the successes and problems encountered since the introduction of the
user fee policy in 1996. He used cross sectional data from a number of health professionals
and health workers in two of the hospitals. It was realised that fees reduced attendance at
tertiary levels and increased at primary level facilities. There was some level of allocative
efficiency as a result of the fees. It was also realised that exemption categories and revenue
retention at the facility levels needed some expansion.

Kipp et al (2001) did a study in the Kabarole District in Western Uganda. Their objective was
to determine the impact of fees on the utilisation of health services in a community-based
cost-sharing scheme. They defined utilisation as the number of outpatient visits during a
given period. Eleven out of the 38 government health units that had introduced user fees
financing schemes were included in the study. Outpatient utilisation was assessed as the
median number of visits per month before and after cost sharing began. At the end of the
study it was found out that the overall utilisation of general outpatient services dropped by
21.3%. Utilisation however increased at facilities located in remote areas while it deceased
at the urban or semi urban areas. The increased utilisation in remote areas was believed to
be largely attributable to factors such as an improved drug supply to health facilities and
increased public identification with community projects in the remote areas. This constituted
an improvement in delivery of services and as an incentive for health workers to attract more
patients to the facilities resulting in increased attendance in the remote areas.

3.5 Studies in Ghana

In Ghana studies were undertaken retrospectively to compare utilisation levels before and
after the major increases in fees in 1985.
Alifoe (1988) in his study assessed patients’ satisfaction or otherwise with services at the Korle-Bu Teaching Hospital after the introduction of hospital fees and also found out whether health workers had the necessary tools for work. He administered two separate questionnaires to two different sets of randomly selected patients and 60 health workers. The patients selected were people who had at least visited the hospital once before the fees were introduced in July 1985. The health workers were heads of various units who had worked with the Ministry of Health for at least five years. To 85% of the patients, health care was accessible. To the other 15%, the problems they had were with distance, transport difficulty and unavailability of doctors at the facility nearer to them.

Writing on “Factors Influencing Access and Utilisation of Health Services of Migrants”, Da Falla (1988) interviewed 1030 households, medical and paramedical staff, tribal chiefs of migrants and traditional medical practitioners. He supplemented these with a walking survey. His findings indicated that 48% of the migrants used hospitals for delivery. Thirty eight percent used traditional birth attendants because of high costs associated with using hospitals. Many migrants could not cope with the cost of medical services. Those using the University of Science and Technology (UST) hospital were not satisfied with services due to the non-availability of drugs at the hospital. They also complained about delays in obtaining services.

Waddington and Enyimayew (1989) in their study of the Ashanti-Akim District found that there were sharp drops in utilisation at all government health facilities. Over a two-year period it was observed that the drops at the rural health units were sustained. At the urban health centres, attendance gradually rose back to their pre-1985 levels over a two-year period. In another larger study done by these same two people in 1990 encompassing nearly 25% of all government health facilities in Ghana, the above general pattern was again confirmed and a concentration of utilisation among patients in the economically active groups were shown. Fifteen percent of operating costs were recovered according to the
study. However, the study showed that a considerable proportion of the population diverted their demand to unlicensed sellers of drugs. Utilisation levels at the mission hospitals increased even though they had already been charging user fees for years. The increase could be attributed to diversion in demand from public facilities and also because of the perceived high quality of care they are believed to be offering. Mission hospitals are known to operate discriminatory fee systems to protect the genuinely poor.

Arthur (1989) looked at the effect of the introduction of fees on the role of hospital welfare officer. He also made use of interviews and a review of hospital records to find out the functions of the hospitals' welfare officers of the Effia Nkwanta hospital and to also find out how the public makes use of the facility. His key findings were that patients encountered financial difficulties when they visited the hospitals, hospital fees prevented patients from using the health facilities, they therefore resorted to self-medication and almost none of the patients contacted the welfare officers for advice.

As a follow up case to Waddington and Enyimayew's work in the Ashanti-Akim District, Hamel, (1989) did a case study of the Dwease Health Post and the Juaso Health Centre. He examined the utilisation patterns from 1984 to 1989 of the two health facilities. The number of consultations was found to have decreased and fluctuated from 23,400 in 1984 to 2000 in 1986 then to 3000 in 1989. The proportion of under-five utilisation decreased over the study period. The five to fourteen age group remained stable, the fifteen to forty four group showed a steady increase and forty five years and above showed fluctuation with a general downward trend. The number of male utilisation increased. In short the increases in user fees were followed by a change in utilisation in terms of gender, and age groups and total consultations.

In a related study, Tasiame (1990) investigated the impact of introduction of hospital fee on health care delivery, the level of patients' satisfaction with medical treatment, whether
patients could afford the current charges and on the part of the health workers, whether they were satisfied with the equipment. Ninety five percent of those interviewed used government health facilities. Most of these people had to buy their drugs outside Korle-Bu; only 43% obtained the drugs from the hospital pharmacy. It was observed that there were no essential drugs in the emergency room. Eighty two percent of the patients were satisfied with the care given by doctors, nurses and other paramedical staff. On affordability, 55% of patients could not afford any further increase, 40% claimed that they needed assistance from relatives before they were discharged. Forty one percent said they were prepared to adjust if only there would be a corresponding improvement in conditions. Fifteen percent believed that attendance had reduced while 37% believed that there was no change in attendance levels. Forty eight percent of health workers interviewed believed that hospital attendance had increased since the introduction of fees. They cited improved service, availability of more qualified personnel and low fees charged in public facilities as responsible for the increase.

Using structured questionnaires and focus group discussions to identify factors that contributed to client satisfaction with health services, Dovlo et al (1992) found out that 85% of respondents were satisfied with health center services. The rest were dissatisfied with supply of drugs, cost of services and with the time spent at the facility waiting to see the doctor, the dispensary and at the laboratory.

Annor (1993) did a case study of Pepease Kwahu to find out how user charges affected hospital attendance. The main aim of the study was to find out the relationship between charges and attendance, identify the persons who utilise the services and their major problems, describe the users’ perception about the charges and finally to find out how people treated their ailments outside clinics. Interview schedules, participant observation and record review methods were used to collect the data. Fifty two percent of the respondents felt that the fees were rather high. Seventy one percent felt that there was the need to pay fees in order to have access to good health care facilities. The other 29% did not think so
because they were too poor. It was found out that there was no direct relationship between hospital fees and hospital attendance and rather factors that affected attendance were specific time of sickness, kind of sickness, one's occupation and availability of alternative sources of seeking health.

Asenso-Okyere et al (1998) did a study aimed at investigating the impact of the cost sharing policies introduced in Ghana between 1985 and 1992 on health care seeking behaviour. The study was conducted in three different districts in three different regions of Ghana; Amansie East in the Ashanti Region, Awutu-Efutu-Senya District in the Central Region and Kwaebibirem in the Eastern Region. Qualitative research techniques were used to investigate the behaviour of patients after the introduction of these policies. Focus group discussions and in-depth interviews of health workers and selected opinion leaders were used to collect data from rural and urban facilities in the districts concerned. It was found out that the cost recovery policies had led to an increase in self-medication, a shift to drug peddlers and drug stores and other behaviours aimed at saving costs. Consultation fees were not charged at the drug stores and services there were faster. The perception was that drug supplies and general health deliveries had improved in government facilities. The study advocated that drug peddlers and drug store workers are trained and that exemption policies be enforced so that the very poor are not excluded from the use of health facilities.
CHAPTER FOUR: METHODOLOGY

4.1 USER FEE MODELS

There are two types of models:

4.1.1 The Standard Model

This assumes that fees produce resources, offer efficiency and equity benefits. Efficiency results from the introduction of price signals that offer patients incentives for using the referral system appropriately and facilitate the reallocation of resources to more cost-effective primary health care. The equity benefits result from the use of resources in ways that benefit the poorest (improvement in coverage and quality of primary health care) and from the use of exemptions or differential charges within fee system to protect the poor from their full burden (Gilson, Russell and Buse; 1995).

4.1.2 The Bamako Initiative Model

This second model is rooted in Africa’s experience of poor primary level care (Jarrett and Ofusu-Amaah, 1992). It emphasizes that revenue should be raised and controlled at the primary level through community-based activities that are national in scope and so are distinguished from “more isolated attempts to initiate community participation and financing in health services” (McPake, Hanson and Mills, 1992).

The Bamako Initiative model sees community participation in management as the critical mechanism for ensuring that revenues are used in ways that address the persistent quality weaknesses of primary care and that the health system is accountable to the users of health care.
4.2 Analytical Framework

The household's decisions on health service utilisation will be dependent on its expectations of effective treatment being made available for the symptoms being experienced. The less likely a favourable outcome is seen as being, the less likely utilisation is, given the severity of symptoms and the potential effect on the household economy. What this implies is that given the seriousness of an ailment and taking the potential effect on household income into consideration, more health care will be demanded if it improves the health status of an individual or household and less will be demanded if it worsens the health status of an individual or household. This is what is referred to as perceived quality.

Impact of fees on utilisation can be looked at from one angle using quality. Utilisation is determined by price and quality. This relationship is a two-way one. On one side all other things (including price) being equal, utilisation determines perceived quality. On the other hand perceived quality also determines utilisation.

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Perceived quality

↑↓

Utilisation
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What this means is that there may be one or two determinate points which we will call points of equilibrium at which for a given price, perceived quality and utilisation will be consistent with both relationships. If utilisation and perceived quality functions are considered at alternative prices, how this equilibrium combination of utilisation and perceived quality is affected by the existence of charges can be assessed.

Another very simple way of finding out about the impact of fees on utilisation is doing an impact analysis by comparing utilisation curves without user fees with those implied by the operation of the user charges system.
The question of whether those who cease to use public health services following fee increases go on to use alternative modern health services could in principle be dealt with by including private facilities in the utilisation curve analysis using dummy variables. It must be noted however that the prices charged by private facilities are not independent of those charged at public facilities, but may also increase when user charges rise (Gertler et al, 1995). This implies that the effect of an increase in user charges at public facilities may have a more negative impact on the overall utilisation of modern health facilities than is implied by cross sectional data, because the extent of switching into the private sector is reduced. The importance of this effect may be considerable. A simulation by Germain and Lavy (1994), based on Ghanaian data, found that a doubling of fees in public facilities only would reduce total utilisation of modern health facilities by about one percent, but if private sector charges were also doubled, the reduction in overall utilisation would be increased by a factor of six, to around nine percent.

The actual quality of curative health care may be defined as a function of the (long term) health status of the patient after treatment relative to his or her health status in the absence of treatment; and that of palliative care (one that lessens pain without removing the cause of it) as a function of the difference between the patient's well being with and without care. The actual quality of preventive care can in principle be measured by the improvement in health status, health-related behaviour with and without the intervention.

To assess the level of actual quality efficiency or the extent of changes in actual-quality efficiency associated with user charges (fees), what is needed is the analysis of the influence of the relevant features of health-related outcomes, to provide a composite index of actual health service quality which can be linked to both health outcomes and financial costs. There are serious practical problems inherent in analysing the relationship between individual components of quality and health outcomes in developing countries. In the case of
curative and palliative care, it requires an empirically sound composite indicator of health status and quality of life, which do not currently exist and would be difficult to construct without a considerable degree of subjective judgments.

The quality index would also be specific to the nature and severity of the illness or injury, making the estimation of a composite measure of quality highly complex even on a theoretical level.

Lavy et al (1995) sought to estimate utilisation functions including data on various combinations of quality-related factors like the age of facilities (A), the physical state of facility buildings (PS), access to electricity (EL), reliability of plumbing (PL), availability of immunisation and ambulances (IA), staff levels (SL), days opened per week (DO), etc using data from Jamaica.

\[ U = f (A, PS, EL, PL, IA, SL, DO) \]

The study revealed a serious problem with multicollinearity using this approach. To the extent that variations in quality are linked with the availability of resources, a facility with poor quality indicators in one category (like a leaky roof or unreliable equipment) is also likely to score badly on other quality indicators. This makes the results very sensitive to the specification used and reduces the likelihood of finding statistically significant results. As a result it is difficult to produce a clear and reliable indication of the actual contribution of each individual variable to perceived quality.

### 4.3 Exemption Mechanisms

The operation of the exemption mechanism is to avoid or limit a negative implication on utilisation by poor people or (in some cases) some other groups of people. Generally exemption policies have not worked well in practice especially in low-income countries and
poor households are excluded from utilisation by user charges despite their operation of exemption policies. It is true that exemptions can help limit any negative impact on utilisation by low-income households. An assessment of the effects of user charges should consider the effectiveness of whatever exemption policies that are notionally in operation. This will also be done through a household survey and also from interviews conducted for officers-in-charge of the various facilities visited.


The underlying principle of World Bank’s cost-effectiveness approach to health interventions is that the benefits of each intervention can be measured in terms of its effect on the length and quality of the patient’s life. This is assessed in terms of disability-adjusted life years (DALYs). In effect, the life expectancy of the patient after the treatment is estimated based on his or her age at the time of treatment and the local average life expectancy at that age. This is then weighted by a “quality of life “factor. This is equal to one where the patient is expected to remain in good health, but is reduced by a specified amount to reflect chronic health problems or disabilities (example loss of a limb, blindness, infertility, chronic pain, disfigurement, etc). A second factor is then applied, based on the age and gender of the patient.

A similar estimation is made for the same patient in the absence of treatment and the first figure is deducted from it to provide a measure (in DALYs) of the effects of treatments on health outcomes. The total financial costs of the treatment is then divided by the number of DALYs thus calculated to give a measure of the costs (in dollars) of each DALY “saved” by the intervention. This is used to rank different interventions, either to judge, which is the most appropriate intervention for a particular condition, or to assess which interventions, should be provided when resources are constrained. This approach can be adapted for the assessment of user fees by regarding their use as a negative intervention. Whereas an intervention is assumed to have positive effects but cost money, user charges are assumed
to have negative effects on utilisation, but to raise money (for quality improvements). In effect, this approach assesses the cost-effectiveness of substituting subsidies for user charges in such a way that this can be compared with alternative use of funds.

4.5 Outline of the Model

In summary we can say that utilisation decisions (including non-completion of treatment and delays in seeking treatment and which covers all health sectors) are interpreted as a result of the interaction between demands and supply as dictated by the price mechanism. Demand for health services is defined as the ability and willingness of households to meet the time and financial costs of treatment and supply as the availability of facilities in a particular location. The pricing mechanism includes all costs of using health facilities. These include traveling and waiting time, informal payments for treatment and other financial costs as well as user fees.

Demand (otherwise referred to as utilisation of health care facilities in this study) is seen as being primarily determined by the health status of household members (whether they need treatment), the household economy (financial resources and time), household’s perception of quality of service available, cost of medical care (C) the economic environment (availability of credit, availability of future economic opportunities). Age, sex and nearness to a health facility also determine utilisation.

\[ U = f (HS, Y, PQ, C, EN, A, S, NH) \]

Where

U=utilisation of health care facilities
HS=health status of household members
Y=household economy (financial resources and time)
PQ=household’s perception of quality of service available
C=cost of medical care
EN=the economic environment
A=age
S=sex
NH=nearness to a health facility

4.6 Study Design

This is a cross sectional descriptive and qualitative study. Both primary and secondary data were used for the purposes of this study. The area of study is the Tema District. Five different health facilities were used; two from urban Tema and the remaining three from rural Tema. For urban Tema we have the Tema General Hospital (TGH), the Tema Polyclinic (TPC) and for rural Tema we have the Ashaiman Rural Health Centre (ARHC), the Manhean Rural Health Centre (MRHC) and finally the Kpone Rural Health Centre (KRHC).

These facilities are a bit separated from each other, but provide similar services. Variations in service provision are due to the fact that they are on different levels of the referral system ladder.

4.7 Methods Used

Ideally the study was intended to compare pre-fees utilisation with post-fees levels but since the former were not available, the first objective was achieved by simply looking at utilisation rates over the past three years to see how the fees are affecting utilisation after over a decade of its implementation. This was not got from the patients and users because it is very hard for them to remember the number of times they even use health facilities in a year. However considering the nature of the topic it meant that users will not only be required to tell how many times they use the facilities in recent years, but also to remember their utilisation patterns in pre-fees times. This seemed practically impossible. There was a
question in one of the questionnaires administered which asked how many times members
of the family use these public health facilities in a year and the responses got were mostly
"whenever we are ill". This confirmed the difficulty in obtaining data on pre-user fees times.
To curtail this problem, hospital records were consulted to take care of this objective. Even
with records from the hospitals, old data could not be retrieved. Graphs were used to
indicate the trends in utilisation between January 1999 and December 2001.

On the part of the patients, issues of affordability were asked and their views on the existing
fees were sought through the use of a structured questionnaire. The questionnaires also
sought to find out whether they were familiar with the idea of the introduction of national
health insurance scheme, whether they were in favour of it and to find out how much they
are willing to pay (WTP) as insurance premium for health services to make the scheme a
reality. The contingent valuation (CV) technique was used to determine WTP. The binary-
with-follow-up (BWFU) technique is the CV method that was used. The respondents were
given a price and asked simply to either accept or reject it; a yes or no kind of response.
After answering yes or no, a follow-up open-ended question is asked to elicit the maximum
amount he/she is willing to pay. All the views expressed by respondents were translated
from the local languages (mainly Twi and Ga) into English by the researcher.
The estimation was done using SPSS.

A third questionnaire was administered to people in the district who were not using the
health facilities at the time of the study. The aim was to help capture issues on non-utilisation
and to find out if there were people who delayed or resorted to other providers for treatment
because of this non-affordability issues created by user charges. The questionnaires in
addition sought to find out whether patients were aware of exemption provisions for the poor.

Data was collected both from hospital records and from structured questionnaires
administered to some of the health workers (directors, officers-in-charge, accountants,
senior nursing sisters and officers at the records sections of the various health facilities) over a period of one month.

This was to help find out about the situation at the various health facilities on how user fees have helped the centres, their views about existing fee levels, exemptions, attendance levels (for the years 1999 to 2001 using quarterly attendances), and to find out some of the limitations they face in the implementing of fees. Views were also sought on issues like staff attitudes, staff improvements, drug supply and the maintenance of the facilities.

4.8 Other Sources of Data

Data were collected from other places too. Various budget statements from the statistical services were used to find out government budgetary allocations to the health sector over the years. The Ministry of Finance and the International Financial Statistics also provided certain very relevant data to the study.

4.9 The Area of Study; Tema District

Tema which serves, as the administrative capital of the Tema Municipal Assembly is a coastal city situated about thirty kilometers east of Accra, the capital city of Ghana. The assembly shares boundaries with the Dangme West District Assembly (DWDA) on the north and east, on the west, with the Accra Metropolitan Assembly (AMA) and on the east with the Ga District Assembly (GDA). It is bounded on the south by the Gulf of Guinea. The Greenwich Meridian 0° longitude passes through the city of Tema. Until 1952 when the Government of Ghana decided to develop a deep-sea port, Tema was a small fishing village. Tema since its creation had undergone various stages of development from Local Council then became part of the Accra City (that is Accra-Tema City Council), to autonomous District Council in 1974. In December 1990, the Tema District Assembly was elevated to the status of a Municipality. The Municipality covers an area of 35,959 kilometres made up of 163
square kilometers government acquired area and the remainder belongs to traditional authorities, stools and families.

4.9.1 Health Services

Health delivery is fast growing in the Municipality. There are 70 private and public institutions. The public ones includes the Tema General Hospital (TGH), Tema Polyclinic (TPC), Manhean Health Center (MRHC), Ashaiman Health Center (ARHC) and the Kpone Health Centre (KRHC).

Table 4.1 Public Health Institutions in the Tema Municipality

<table>
<thead>
<tr>
<th>Type of facility</th>
<th>Number</th>
<th>Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tema General Hospital</td>
<td>1</td>
<td>MOH</td>
</tr>
<tr>
<td>Tema Polyclinic</td>
<td>1</td>
<td>&quot;</td>
</tr>
<tr>
<td>Health Centre</td>
<td>2</td>
<td>&quot;</td>
</tr>
<tr>
<td>Environmental Division</td>
<td>1</td>
<td>&quot;</td>
</tr>
<tr>
<td>Port Health</td>
<td>1</td>
<td>&quot;</td>
</tr>
<tr>
<td>Maternity Homes</td>
<td>1</td>
<td>&quot;</td>
</tr>
<tr>
<td>Dental Clinics</td>
<td>2</td>
<td>&quot;</td>
</tr>
<tr>
<td>Rural Health Center (Kpone)</td>
<td>1</td>
<td>&quot;</td>
</tr>
<tr>
<td>P.H.C. Centres/Rural</td>
<td>7</td>
<td>&quot;</td>
</tr>
<tr>
<td>Outreach Programme Centres</td>
<td>25</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

Source: Health Directorate, Tema

To facilitate the Municipality's expanded programme on immunisation, 7 clinics, 82 satellite clinics, 43 outreach clinics and a mobile clinic have been established to facilitate coverage.

4.9.2 Private Health Care Providers

There are a considerable number of private health care providers too in the district. In addition to those listed in the table below, there are an uncountable number of drugs stores and pharmacies in the district. Most people visit these pharmacy shops when they have minor complaints while others go there to buy the drugs they could not get from the hospitals and clinics. The private clinics are generally more expensive than the public ones and like
the latter are also run by qualified personnel. They offer all kinds of services from normal medical care to complex gynaecological services and operations. It is the rich who think they cannot afford to “waste” time at public hospitals who patronise such institutions. Some patients also use private clinics out of ignorance and/or based on the perceived quality of care provided there. Such patients take the amount of drugs given and laboratory tests they are made to take, as a measure of quality of care. The problem with private providers is that they are capable of over prescribing.

In urban Tema, there are no herbalists and spiritual healers. These people are found mostly in the rural Tema, but time and financial constraints made it impossible to visit all these people.

Table 4.2 Private Health Institutions in the Tema District

<table>
<thead>
<tr>
<th>Type of Facilities</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Hospital</td>
<td>10</td>
</tr>
<tr>
<td>Private Clinics</td>
<td>25</td>
</tr>
<tr>
<td>Dental Clinics</td>
<td>3</td>
</tr>
<tr>
<td>Maternity Homes</td>
<td>7</td>
</tr>
<tr>
<td>Corporations/Clinics</td>
<td>15</td>
</tr>
<tr>
<td>Quasi Government</td>
<td>1</td>
</tr>
</tbody>
</table>

Sources: Health Directorate, Tema.

4.9.3 Staffing

These include registered nurses, enrolled nurses, medical assistants, Para medicals, accounts officers, midwives, community health nurses, orderlies, dispensary attendants, pharmacists, watchmen and casual workers. The Tema Polyclinic has seven doctors and a few specialists. The district hospital, Tema General Hospital has a lot more specialists than
all the other centers since that is where all referrals are sent. The health centers have medical assistants taking care of the patients who report there. All but just a few receive their salaries from the government of Ghana. For instance two doctors at the polyclinic are from Canada and Japan and so do not take salaries from the government.

Table 4.3 Staff strength in Public Health Institutions in the Municipality (fourth quarter 2001)

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Staff Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tema General Hospital</td>
<td>531</td>
</tr>
<tr>
<td>Tema Polyclinic</td>
<td>144</td>
</tr>
<tr>
<td>Ashaiman Health Centre</td>
<td>61</td>
</tr>
<tr>
<td>Kpone Health Centre</td>
<td>19</td>
</tr>
<tr>
<td>Manhean Health Centre</td>
<td>48*</td>
</tr>
</tbody>
</table>

Source: Health Directorate, Tema.

4.9.4 Services Provided

With the exception of the Polyclinic, all the other hospitals operate a 24-hour service.

Services provided at the health centers include maternal and child welfare child, medical, educational talks, school welfare clinics, family planning and immunisation, dental, laboratory services, x-ray, psychiatry and eye care services. At the district hospital more complex services such as surgical care, mortuary services, physiotherapy and theatre operations are offered. The district hospital is the only one of the five that offer in-patient services for sicknesses like malaria, hypertension, pneumonia, accidents, anaemia, HIV/AIDS, hernia and abortion. All the other centers have just one ward each with between four to six beds to cater for maternity admissions as well as a room each for detaining patients who are very ill. Most cases in urban Tema are reported in the mornings and so the mornings are very busy times at those centers. The situation is a little different in the case of the rural health centers. At the KRHC for instance the staff explained that most of the town folks are farmers and
Because of this they have no fixed reporting times. Some return from their farms in the evening, cook and eat before they think about visiting the clinic (as they refer to the place). This is made possible for the fact that a few of the health personnel live not far from the clinic. Thus at the rural health centers the cases trickle in at any time of the day. Tuesdays seem to be the busiest clinic days at the MRHC and the KRHC. This is because Tuesdays are non-fishing days and so the town folks who are mostly fishermen and fish sellers have a little time to “spare”. It was observed at 11.15am on one Wednesday morning that majority of the cases for the day had been dealt with at the MRHC and the rest were just trickling in.

Table 4.4 Bed State at the District Hospital

<table>
<thead>
<tr>
<th>Ward</th>
<th>Number of beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity</td>
<td>62</td>
</tr>
<tr>
<td>2 male wards</td>
<td>66</td>
</tr>
<tr>
<td>2 female wards</td>
<td>54</td>
</tr>
<tr>
<td>2 children's wards</td>
<td>47</td>
</tr>
<tr>
<td>Isolation</td>
<td>15</td>
</tr>
<tr>
<td>Sick babies nursery</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>254</td>
</tr>
</tbody>
</table>

CHAPTER FIVE: RESULTS AND ANALYSIS OF FINDINGS

5.1 Introduction

This chapter seeks to look at the results of the study as well as an analysis of the findings. The whole concept of the introduction of user fees and what its strengths and weaknesses are as far as the Tema district is concerned will be looked at. Specifically the impact of fees on utilisation levels, the idea of exemptions and how it is working and the benefits hospitals are deriving from fees will be tackled. Also to be looked at are the ranking of available alternatives, households’ views on the current user fees and on the proposed National Health Insurance Scheme.

5.2 RESULTS OF THE STUDY

5.2.1 Utilisation

Most studies done in the past by various researchers (as discussed in chapter three) indicated that increase in fees had a negative effect on utilisation.

In the case of the district there was a severe problem with getting data from as far back as 1980. This, the researcher believed would have helped look at the trend from the pre-fee levels through to this present level since the study was intended to be an impact analysis. Available data however exist in some cases on monthly basis and in other cases on quarterly basis for past few years. From the table and graphs (refer to appendix), we can say that with the exception of the Tema General Hospital that recorded a decline of 19% in utilisation between 2000 and 2001, all the other centers recorded increases with the KRHC recording the highest increase of 57.79% between 1999 and 2001 followed by TPC (31%), ARHC (26.3%) and MRHC (26.0%). It therefore follows that utilisation rates have rather increased years after the introduction of user fees. This increase in utilisation according to one officer is due to the improvements in drug supplies at the various institutions.
At the KRHC, however data was available on monthly basis. The officer-in-charge explained that different factors account for increases in utilisation at certain times of the year. During the rainy season, a lot of children are brought to the institution suffering from malaria. Also during the fishing season the people who are mostly fishermen get money and are able to report with every problem they have. This was also the case for the MRHC.

In spite of these increases, the centers have never had a problem with over crowding.

In an interview conducted among residents in the district, 70.5 percent of the respondents admitted that they use government (public) health facilities at every point in time while 28.9 percent said they did not use public health facilities at all.

All the health centers recorded malaria as the top disease reported between 1999 and 2001. When asked about the commonest ailments that frequently affect them, respondents stated malaria/fever based on the symptoms that they have. The percentage was 80.7 as against 3.1, 1.2 and 13.5 for cold, typhoid and other illnesses in that order.

5.2.2 Ranking of Available Alternatives

Households in the Tema District use public health facilities a lot. This does not mean that there are no private institutions or other alternatives available in the district. As said earlier on 70.5 percent of respondents agreed that they use public health centres.

Asked why they preferred to use the public hospitals, 12.7 percent of them said they were used to the place, 27.7 percent reported that it is due to cheaper charges there as against those charged at the private hospitals, 12.0 percent go there because it is very near to their homes and the remaining 21.1 percent go there because of the good quality of care and the
effective referral system network. The remaining 16.9 percent go to public hospitals for other various reasons including the fact that their various companies have them registered there. The missing 9.6 percent in the system represents those who do not use the public health centres at all.

Putting both those who go there and those who do not together, 47.6 percent admitted it is their first place of visit when they are ill and for the remaining 52.4 percent they make use of other available alternatives before visiting these centres or do not even go there at all.

The issue now is to find out what happens to the remaining 28.9 percent who do not use public health facilities. The question is “what do they do when they are ill?”

In spite of the fact that there were a lot of contradictions and inconsistencies in the way respondents answered questions, it was realised that private hospitals and clinics as well as drug stores were alternatives to the use of public health centres and hospitals.

Interestingly, 96.4 percent of those interviewed use drug store at every point in time. Various people visit drug stores for different reasons. For some people their visits are for more than one reason, sometimes one individual has more than three reasons for visiting the drug stores. When asked to give the one major reason why they use these drug stores and pharmacies, 61.4 percent say they report to drugstores when they experience minor ailments like slight headaches, colds and stomach pains.

Twenty three point five percent visited drug stores when they had to buy drugs prescribed from the hospitals. Their visits were therefore mainly to obtain drugs that they could not get to buy from the hospitals. For 10.8 percent of respondents drugs at these stores are relatively cheaper. Cheaper in the sense that an individual suffering from malaria can himself or herself decide to buy only half of the course needed for malaria treatment.
individual if he or she visits the hospital will be made to pay for the full cost of malaria
treatment which will certainly be more expensive than what he/she is able to buy from the
drug store. For these people, the drug store will be their first place of visit whenever they are
sick unless they are so sick that they have to be rushed to the hospital by another person.
For the remaining 3.6 percent their visit to drug stores is simply because these are very
close to their houses and are therefore more convenient for them to use.

Looking at the responses obtained it is clear that the major alternative to the use of public
health facilities due to user fees is the use of drug stores. Statements from almost all the
respondents confirmed the fact that user fees led to self-medication and non-completion of
treatment. It was very clear that the majority of visitors to drug stores went there already with
the kind of drug they are looking for and the amount of money they are ready to spend in
mind. They did not go asking pharmacists to prescribe drugs for them.

What this means is that people do not necessarily take the full dosage of drugs needed to
cure their illnesses, but rather went in for what their money was capable of buying without
caring whether that was enough for the illnesses or not.

5.2.3 Households’ Views on the Current User Fees and on the Proposed
National Health Insurance Scheme

User fees as stated in chapter two were intended to correct the problems that existed in the
health sector at that time.

Apart from what was obtained from the hospital records, which indicated that utilisation has
increased over the years even though user fees are still being charged, the opinion of the
users in the Tema District was sought to find out how they see and feel about fees.
Below are a few of what some of the respondents interviewed at the health facilities had to say on various issues. These were people who had just received treatment and were about to leave for their homes.

Respondents found charges at public hospitals more affordable than those at the private hospitals. A thirty-four-year old man who was suffering from back and neck pains (and was not satisfied with the treatment he was receiving from private hospitals and so decided to try the public hospital) said he was very surprised at the low charges at public health facilities as against those at the private hospitals. For him, even if charges were increased and matched with quality of service, he will continue to use the public facilities.

Another person suffering from feverish conditions mentioned that she spent sixty thousand cedis one time when she went to a private hospital. At the public facility she had paid only seven thousand cedis for the same drugs.

Indeed for all of the respondents, charges at the public hospitals were very moderate compared to those at the private hospitals. They however did not want fees to be further increased. For majority of them, their utilisation levels will greatly reduce if fees were increased. A few however stated they would continue to use the health facilities even if fees were increased because there was no other way out. It was evident from the responses got that if the increases in fees are matched by increases in quality patients will continue to utilise the hospitals.

For another section of the population, fees were too much and they were calling on the government to reduce the fees since most Ghanaians are unemployed. High fees according to them have made it impossible for majority of sick people to visit hospitals when the need to do so arises.
For those interviewed outside the hospitals at the time of the study, but who have been using the facilities from time to time, even though charges were quite too expensive for their pockets, they agreed that they were relatively much cheaper than what pertained at the private hospitals.

Out of the one hundred and sixty five people interviewed, 70.5 percent claimed fees charged were expensive for their pockets while 28.9 said otherwise. To 78.9 percent of them especially those in rural Tema who all fell within the low income group, fees being paid at the facilities affected other expenditures of theirs like the payment of children’s school fees, electricity and water bills and sometimes their intake of food (when family members have to undergo operations as in the case of one family at Tema Manhean where the family spent seven hundred thousand cedis on a sick member of the household). Even part of those who claimed the charges were not very expensive for their pockets admitted that it sometimes affected their ability to meet other responsibilities. This is mainly because illnesses occurred when they were least expected and in most cases provisions were not made in the family budget to cater for such eventualities. However for the remaining 20.5 percent, taking care of hospital bills was not a problem at all. This figure includes those whose medical expenses are taken care of by the various institutions that they work with.

Ninety point four percent would not want fees to be increased while the rest would not necessarily mind if it is increased or not. Asked if they will still stand their ground (of not wanting fees to be increased) if increases in charges were going to be used to improve upon quality of services and efficiency in the system, some (69.3 percent) were willing to pay up to an extra amount of fifty thousand cedis. The remaining 30.1 percent were very emphatic about their “no” and were not going to pay anything more than they were already paying. All respondents supported the idea of a national health insurance scheme and were willing to make contributions towards it. For majority of them (74.7 percent) they were willing to contribute up to twenty thousand cedis a month if the scheme is put in place. 7.8 and 16.9
percent were willing to contribute a maximum of thirty thousand cedis and above thirty thousand cedis respectively.

5.2.4 Exemptions

(A) What they are: These were packages that came with user fees. The objective was to ease the burden on paupers and other categories of people who were expected to suffer under the scheme (refer to chapter two).

All the officers-in-charge of the various health facilities visited revealed that there were people who were benefitting from exemptions as specified by the Ministry of Health. The cost of treating these people were booked and sent to the government at the end of every year. What the government does is to refund the monies back to the health centres.

2001 figures from one health centre visited showed that, exemptions were provided to:
- 23105 antenatal visits
- 3905 elderly patients (those above 70 years of age)
- 20129 children under five years old
- 5995 staff
- 899 paupers

At the KRHC, provisions also existed (and continue to exist) for clients (as patients are referred to now) who are not paupers but who do not have enough money to meet all costs of treatment. These persons are allowed to make part payments and to pay the other part at later dates. This is made easy by the fact that Kpone is a relatively small community where everybody knows his or her neighbour and so collecting the monies is not a difficult thing.

Implementing the policy of exemption is not easy at all on the part of the facilities. Unlike antenatal patients, services like immunisation, the elderly and children under five years of age who are easy to identify, it is very difficult to declare someone as a pauper. It is therefore the work of social welfare officers to verify that certain categories of persons are
paupers for them to be exempted like what pertains at the psychiatric hospitals. The problem is that the social workers are not available at the health centres thereby making the identification very difficult for the officers.

A senior nurse at the MRHC mentioned that because the first three maternity visits are free, some patients have as many as three different cards for different health centres and so end up enjoying more exemptions than they are supposed to enjoy. The unavailability of a mechanism to check this practice is costing the health facilities a lot.

The biggest problem however is from the government. Several visits to all the centres revealed that close to seventy and eighty percent of all hospital visits are made by children under the age of five and pregnant women. Refunds from the government for these exempted people come in very late. What this means is that the facilities' ability to buy drugs for subsequent years is greatly reduced. Getting the refunds from the government was so difficult in 2000 and 2001 that most centres had to minimise their exemption levels so as to be able to recover money enough to run the centres. Up till now the government has not finished refunding all the monies it owes some of the centres.

(B) The Way Out

a) Identifying paupers in the rural areas is not as difficult as in the urban areas. The officers-in-charge are the only ones authorised to declare people as paupers. So when a patient is unable to foot his or her bills, he or she is taken to the officer for an interview and for approval. Some of these people are exempted based on their appearances, clothing and by the way they respond to questions. In other cases patients who are brought in by "good Samaritans" who find them along roadsides and in town are also exempted. At Kpone, people who fall ill while traveling through the town to other villages and towns and are brought to the clinic are also exempted. The explanation is that in this present day where lorries are in abundance, it is assumed
that all those who still travel on foot through the town to other towns and villages are poor.

b) Because of the difficulty in obtaining refunds from the government, exemptions have been minimised. Apart from paupers, pregnant women enjoy free services and routine drugs free of charge on their first three visits alone. They pay for drugs when they are ill. At the maternal and child health units, patients are charged a token of one thousand cedis to take care of things like cotton wool, syringes and vaccines.

The situation was a bit different from the side of the respondents both at the hospitals and those who were not using the facilities at the time of interview. Of all those interviewed, there was not one who could attest to the fact that there were such provisions for the specified categories of people in the district. Only one man had heard that it happened once in Koforidua (not Tema).

For 21.3 percent of the total number of one hundred and sixty five respondents, they had heard that exemptions exist but even with that number, none of them have seen or heard of any person who has been exempted. One respondent remarked that she has heard that it is for children less than five years of age and for very old people too. One old woman who admitted being made aware of the scheme said it was of no use because she ended up paying more than she probably would have paid.

Asked what they did when they were very ill but had no money to visit the clinic, 3.6 percent responded that they have never had problems with paying medical bills because they always had money, for 1.2 percent their bills are taken care of by their employers, 3.0 percent responded that they will use herbal medicine, 27.7 will visit drug stores with the little money they have and buy less drugs at a cheaper cost, 31.3 will borrow money from friends and
relatives to visit the clinic, and the remaining 32.5 percent said they will rather stay at home and die than visit the health centres with no money and be disgraced by health workers.

5.2.5 Impact of User Fees on Health Facilities in the District

a) Raising of Revenue

User fees were for the generation of revenue. Revenues raised were to help improve upon services at the hospitals. Revenue collectors at the various facilities are responsible for this. Fees account for between 75-80% of monies used at the hospitals. All monies collected belong to the government but are retained (100%) at the banks by the centers. Monies collected are kept in two separate accounts. The first account which is the Management Committee Account is used for minor maintenance and repair works, buying of stationery, buying beds and mattresses where needed, paintings and in the case of one rural health centre, hard working staff are rewarded as a means of encouraging the rest to bring out their best. Money from this account is used at the discretion of the officers-in-charge. The second account is solely for drugs. These drugs are bought from the central, municipal or regional medical stores. The amount of drugs bought by a centre depends on its ability to pay. Some donor assistance comes in once a while but officers are restricted in their use of such funds.

Fees are helping the centers a lot. Frequent renovation works have left the places looking very neat as compared to pre-fees days (a personal observation by the researcher). The good thing about fees is that they are always available to be used when needed without having to go through cumbersome bureaucratic government procedures. Basic life-saving drugs are being acquired at minimum transaction costs. A few new projects are also springing up. In the case of the Tema Polyclinic, old wires that fenced the place have been replaced by clean white wall on the initiative of the Director-In-Charge.
An interview with the accountants at the various centers revealed that they all realised their revenue targets at least for the year 2001 both for the Drug Revolving Fund that is used to buy drugs and also for the Management Committee Accounts that is used for the management of the facilities.

The Officers-In-Charge however mentioned the fact that it is not easy meeting these revenue targets. A senior officer at one of the centres commented that a lot of internal controls are needed in order to achieve revenue targets. For instance there was the need to monitor drug supplies and to seek the cooperation of all service providers because the providers can decide to redirect patients to their various private pharmacies making it impossible to meet revenue targets. A very disciplined payment and purchasing system operated to check things like quality and prices of items bought. There are purchasing committees at some centers to take care of all purchases just as a means of checking the system.

All but one of the officers was of the view that fees charged must be increased to reflect actual expenditures and costs of running the centres. At the KRHC the officer-in-charge mentioned that since it is in a rural area, increases in fees should be done slowly since a sharp increase would result in non-utilisation.

b) Drug Supply

Unlike pre-fee times, drugs are now always available depending on the health centre's ability to pay. Money is demanded by the central, regional or district medical stores before they are supplied to health centers. At the district hospital, the percentage tracer drugs for the years 2000 and 2001 were 86% and 84% respectively.

In spite of this one senior officer, wished that there would still be an improvement in drug supply as well as proper procurement practices in which all health personnel will be involved. This he said is always in the hands of pharmacists alone. He also wished that the range of
purchasing drugs would be widened and that more pharmacists will be employed at that particular centre so they could manufacture their own drugs.

c) Quality of care

At the TGH, a Quality Assurance Team has been formed to deal with issues relating to quality. Seminars are organized from time to time for members of the team. The mortuary, isolation ward, one residential bungalow and the record office have been rehabilitated and renovated.

A lot of paintings had been done, leaking roofs repaired, new curtains bought and minor repair works, and maintenance and renovations had also been done at the KRHC. In collaboration with the Rotary Club of Tema, a number of trees had also been planted making the place very beautiful. This has further attracted a lot of clients to the place.

The MRHC has also been able to undertake minor renovations and maintenance works and to buy the basic things needed to run the hospitals especially drugs.

The TPC has replaced its fence with a wall, has drugs available all year round and has a very neat environment compared to the pre-user fee period.

At the ARHC it was acknowledged that user fees have given the hospital a free hand to operate effectively and efficiently. Monies raised are used to buy drugs at very regular intervals. Minor maintenance works and renovations are also done from time to time.

The various health centres have different facilities depending on their levels. For instance the KRHC and the MRHC have no laboratory facilities, the TPC and the ARHC have small ones to meet the demands of the cases they handle. The complex laboratory tests are done at the TGH.
d) Efficiency

At the TGH the 24-hour service has been strengthened by providing rest rooms for most of the departments. Broken down public address systems have been replaced with new ones. Motorola have been supplied to staff on duty. Amplifiers have also been bought for the effective OPD talks and other information dissemination.

At the KRHC too, a public address system, a video deck and a television set have been bought for education purposes.

In the case of patients' waiting time however there seem to be a lot more to do to reduce the time spent by patients at the hospitals. While there seems to be no problem at the rural health centres, the urban areas have a little problem. It was reported at the TPC that some doctors report late for work and this increases patients' waiting time. At the TGH it was hoped that there would be prompt attention for patients at the first place of contact and also by the nursing staff before they see the doctor. The problem of some doctors reporting late was also mentioned here. It was hoped that the services of a computer would be employed to save the time spent going through cumbersome procedures and that proper direction signs will be acquired with time.

The referral system seemed to be working quite well in the district. Patients' whose cases cannot be treated at the rural health centres due to lack of the necessary equipments are referred to the district hospital. Some patients however visit the TGH as their first place of contact because it is relatively nearer to them and not necessarily because they are bypassing the lower facilities on the referral system.
e) Staff Improvements
The district has over the years been successful in organising a number of training programmes for the members of staff. Among the programmes organised in the year 2001 are breastfeeding and lactation management, management of minor ailments, infection prevention practices, a reproductive health review workshop, training in quality control as well as revenue mobilisation and collection.

5.2.6 Major Problems Facing the Health Sector in the District
In spite of the various advantages that the health facilities are enjoying as a result of the introduction of fees, there are a few problems worth mentioning.

a) Population Pressure on Services
In the case of the TGH for instance, it is a district hospital in the municipality serving the municipality and its satellite towns and villages like Kpone, Afienya, Dawhenya, Prampram, Dawa, Sege, Kasseh, Ada. Kakasunanka, Katamanso, Appollonia, Sakumono, Lashibi and Nungua. The population of the catchment area varies between 300000 and 500000. The hospital however does not have enough staff to deal with all the cases reported. Cases involving the need for heart and orthopaedic surgeons are always referred to the regional hospitals. The hospital is also close to three major highways, the Tema motorway, Tema-Aflao, and the Tema-Akosombo roads. Because these three are first class roads, a lot of accidents occur on them and the victims are almost always sent to the TGH. The hospital however does not have an accident unit to deal adequately with the cases and this is of a major concern to the administration. The hospital also has to deal with a lot of cases concerning patients who abscond after receiving treatment. Revenue lost from these cases run into several millions of cedis every year.
b) Inadequate Staffing

The problem of inadequate staff is more prominent in the rural Tema areas. There is the need for more nurses to manage the mobile health clinics. This concern was expressed at the MRHC. More nurses are needed to visit schools, day care centers and small communities in the Manhean area to ensure and educate people on cleanliness. Most of the people in Manhean are very ignorant and so the few nurses and health workers have the additional task of at times even following pregnant women to their homes just to make sure that drugs given are taken. This is a personal observation made. The need for a dispensing assistant and more nurses were expressed at the KRHC too.

c) Maintenance

The MRHC is facing problems with major renovation works. As things are now, health facilities are only allowed to deal with small renovations and leave the major ones to the government. Meanwhile the place has known no major renovation since it was built in 1972 and commissioned in 1974. Whereas the help from the central government is not constantly forthcoming, the money in the centre's accounts is woefully inadequate to deal with all needs of the health centre. All the health center's toilets (except one at the maternity ward) are out of use. This includes the one at the Chief Health Officer's residence. Facilities like laboratories, a stand by generator for the maternity ward and vehicles for the satellite and mobile clinics need to also be in place before the place is upgraded but they are not available. The treatment and recovery rooms are too small and have very limited beds to deal with all the cases reported especially in the rainy season when a lot of malaria cases are reported and certain patients need to be detained. Patients who need infusions are attended to on benches at the OPD. The wiring system at the place is poor and sometimes damage equipments. The drainage system also needs to be looked at seriously. The officer-in-charge therefore also proposed that fees be increased to cover all these areas.
d) Accommodation and Security

The few nurses working at the KRHC needed accommodation. This is important concerning the kind of patients they deal with. As mentioned earlier, some of these people visit the health centre after they have returned from their farms and at times very late in the evening. The need for fence was expressed to protect the health centre from intruders who go to the extent of using the surroundings as places of convenience. In the view of the officer-in-charge, fees need to be increased but the approach should be very gradual so as not to result in non-utilisation by residents in the area.

e) Other Related Problems

While the other three health centres had no problem with patients' waiting time, the officers at TPC and TGH wished that doctors would report early to reduce the length of time patients spent before being attended to.

The need for computers was expressed to save time going through cumbersome procedures. Whereas there was no problem with staff attitudes in the District, officials at the TGH wish that a better rapport will exist between staff and patients (clients) since services are now very competitive. A good staff attitude is needed to attract those who can pay for health services. Bad attitudes rather attract those who cannot pay.

5.3 ANALYSIS

5.3.1 Utilisation Levels

Figures from the hospitals indeed confirmed the fact that utilisation in general is ever increasing in the Tema District. This confirms what Waddington and Enyimayew (1989) mentioned in their study of the Ashanti-Akim District: that utilisation at the urban areas regained pre-fee levels after some time.
This study's results do not therefore support what a few other researchers found in their various studies: that user fees have affected utilisation negatively. This is to say that fees have pushed certain classes of people who are believed to need health care most out of the use of health facilities [De Bethune et al (1989), Mwabu et al (1996), Waddington and Enyimayew (1989), Knauth (1991), Biritwum (1993), Asenso-Okyere (1995)].

Health officials believe the increases are due to the improved quality of services and efficiency of care that have resulted from the collection of fees. Patients on their part have no choice than to visit the hospitals when they are ill and so will go to all lengths including borrowing when the need arose that they seek medical care. Thus, though fee increases cause a lot of inconveniences for various families (as majority including those in the higher income brackets confirmed that fees affected their ability to meet other responsibilities), visits to public health facilities take place whenever the need arises. Even for those who cannot visit health facilities at all, the drug stores and pharmacy shops are alternatives that are readily available to them. In view of the fact that there has been no evidence of people dying in the district, it is alright to conclude that fees have not caused any serious problems for users of facilities in the district under consideration.

A lot of factors could explain the increases in utilisation. It could be as a result of increases in population or even perhaps as a result of very poor sanitary conditions (like choked gutters breeding too many mosquitoes) in the municipality. There was a serious problem with availability of data. If population figures for the district were available it would have made the analysis relatively easier in the sense that the level of utilisation as a proportion of the total population for different periods would have been employed to make a better analysis.
5.3.2 Benefits to the Health Facilities

User fees have indeed done the health facilities a lot of good. As a resident in the district, the renovations and innovations that have accompanied the implementation of fees are very much appreciated by the researcher. Various wards have been extended; new ones are being built from time to time and the whole system of doing things have been changed. The places now look neater than they used to be. Looking at some of them they can easily pass for private hospitals. Based on the initiatives of the officers-in-charge (as in the case of the MRHC for instance) an annual award scheme has been instituted to reward hardworking staff. This is a big motivation for the members of staff who are doing a lot of sacrificial job like going round educating residents and making sure pregnant women who visit the hospitals take medications. In some other instances transport to take care of outreach programmes are taken care of by the centers and in some cases by the nurses themselves. This award would not have been in place if the government were still providing all the money needed to run the place. Looking at the situation critically one cannot help but agree with the health workers that fees need to be increased to meet the day to day running of the health facilities.

It is worth mentioning that various researchers have not focused much on the benefits health facilities are having from user fees, but rather on its impact on users. However it is no secret that immense benefits are being derived from fees. Enyimayew and Waddington (1986) were quick to mention some of these benefits. Lanterns for night watchmen, buckets for inpatients' use when on admission, benches for outpatients to sit on while waiting to see the doctors and metal cabinets were some of the few items which user fees enabled the health centres in the Ashanti-Akim District to buy without waiting for money from the Ministry of Health.

Issues of affordability cannot be blamed entirely on the introduction of fees. Even in the advanced countries where economies are performing relatively better, there is nothing like
free medical care. Medical costs are very expensive in the United States of America and in the United Kingdom. What is really helping people meet their health expenditure in the advanced countries is the availability of health insurance schemes. The problem of non-affordability is solely to be blamed on the non-performance or the slow performance of the economy. Some of the respondents interviewed mentioned that user fees should not be abolished completely because the government cannot continue to provide free services to everyone in the country. Citizens of this country also need to make some small contributions to supplement the efforts of the government. It is clear that the main problem lies with the level of poverty in this country characterised by unavailability of jobs and in cases where jobs are available, salaries are too low to meet existing expenditures. Many people were willing to make reasonable contributions towards health care, but complained about the lack of resources. To these people therefore a further increase in fees will lead to non-utilisation of services.

5.3.3 Exemptions

This provides a major controversy when it comes to analysing the impact of user fees. Figures from the facilities indicate that exemptions granted run into several millions of cedis every year. Interestingly enough for a large number of the population, they were completely unaware of the existence of these exemptions. For those who even knew about exemptions, the knowledge was only theoretical. There was no single person interviewed who attested to the fact that he or she had ever benefited or even knew of someone who had benefited from exemption policies. For most of patients and people, it is an issue of no money no care. In the course of administering questionnaires, there were a few isolated cases where exemptions were required for certain people, but the people concerned knew nothing about any such provisions and for those who knew about exemptions, they would rather die at home than go to the hospital without money because of the fear of stigmatization.
Health officials on the other hand explain they are always willing to make policy apply in genuine cases just that the people who need help never let them know.

This confirms what several authors who study the effects of user fees have to say about exemptions and is contrary to what the World Bank claimed that charging user fees would not hurt the poorest citizens because they have included provisions for "exemptions" for the poor.

Even the World Bank's Operations Evaluation Department (OED) reported on the widespread failure of exemption systems to adequately protect the poorest citizens from the fees. The Bank's annual World Development Report 2000/2001 stated that: "few developing countries, however, have successfully implemented price discrimination in health services through sliding scale fees. In most African countries such exemptions tend to benefit wealthier groups (such as civil servants). In Ghana's Volta Region in 1995 less than 1% of patients were exempt from health user fees and 71% of exemptions went to health service staff." And according to a January 2000 UNICEF paper, "remarkably little evidence exists on the effectiveness of exemption systems for user fees."

In 1999, even the then-World Bank Vice President Eduardo Doryan stated frankly that experience in and since the 1980s has shown that the poor have not been effectively protected in many cases from user fees. A study by the World Bank's OED reported in 1998 that in Zimbabwe, fewer than 20 percent of those eligible received individual waivers for health user fees. A UNICEF study has shown that user fees are not effective because of administrative barriers to obtaining an exemption; many people do not know about the exemptions, and the decision to give exemptions is at the discretion of local service providers whose performance evaluations are often linked to successfully collecting fees. In that same study, a researcher witnessed the case of a 14-year old boy at a hospital in
Zambia who was turned away because his parents could not pay the charges of an equivalent of 33 US cents. The boy was returned to the hospital barely two hours later dead.

The above illustrations show that the case of the Tema District is not an isolated one as far as exemptions are concerned and is exactly a confirmation of the fears of the opponents of the user fees.

5.3.4 Other Issues

Several other issues can be discussed concerning user fees. For instance a WHO report indicated that fees account for barely 5 percent of the health budget. There was also the claim that fees are often used to cover administrative costs for the government and may not translate into direct improvements in services at the local level. These claims are not true for the Tema District. Interviews with the various accountants at all the health facilities visited revealed that they have been achieving their targets for the past few years even though it has not been very easy. As already stated in chapter five, quality and efficiency have improved considerably too.
CHAPTER SIX: CONCLUSION AND POLICY RECOMMENDATIONS

6.1 INTRODUCTION

This chapter presents the concluding remarks from the study, offers some policy recommendations as well as limitations to the study.

6.2 CONCLUSION

In conclusion, it is worth mentioning that the idea of user fees has not been bad at all for the Tema district. The benefits have already been enumerated in previous chapters and they far outweigh the costs of implementing the scheme. It is clear that the government cannot continue to provide free health services for the Ghanaian population anymore. Individuals have a responsibility to contribute to health care provision.

Comparing the costs of receiving care from the private providers with those from the public service providers, even the users of the facilities agree that costs are much lower in the public facilities. The main reasons for non-utilisation are the lack of well-paid jobs and the prevalence of unemployment in the nation. If, in addition to these, services are provided free of charge then the health sector is going to face the same problems it faced before the introduction of the fees in the early 1980s. If the economy grows at an impressive rate and the standards of living of Ghanaians are improved, there will not be a problem with the payment of hospital bills or a significant upward revision of the existing fees.

6.7 POLICY RECOMMENDATIONS

1. Exemption policies need to be strengthened. The public should be made aware of such provisions and social workers must be employed and trained to help identify
paupers because really some people have a problem with paying very small amounts. It is very pathetic when one comes across such cases.

2. In the absence of user fees (as the present government seeks to do), it is necessary that the residents like all other residents in the country be given a lot of education on the introduction and advantages of the proposed national insurance scheme. It is believed that this education will make people understand the need to contribute else the health sector might have the same problems it had before user fees were introduced in 1985.

3. Pregnant women need not be exempted from the payment of these user fees. In all the health facilities visited it was observed that majority of the clients (as patients are referred to these days) were pregnant women and children. If people are made to see pregnancy as a privilege and not a right I believe the problem with population explosion will be curtailed. Incidentally it is those people who fall within the "poor" and "pauper" category that are widely known to be unable to take care of them and their families who continue to give birth most. User fees for pregnant women need to be increased further to act as a check on the rate at which such persons give birth.

4. Since most sick people turn to drug stores and pharmacies when they are ill, it is prudent that the government gives some sort of periodic training to these dispensers to enable them provide safer services.

6.4 LIMITATIONS OF THE STUDY

The major set back in the course of undertaking this study was the non-availability of data specifically those relating to utilisation levels. Pre-fee figures had been sent to the archives (as is said to be done in the health sector after every 10 years) and it was impossible to retrieve them. I had to make do with what was available and that was woefully inadequate.
Users of the facilities could also not remember averagely how many times in a year they utilised health facilities. This made the research a bit more difficult.
QUESTIONNAIRE 1

THE IMPACT OF USER FEES ON UTILISATION OF HEALTH CARE FACILITIES IN GHANA: A CASE STUDY OF THE TEMSA DISTRICT.

MPHIL THESIS

ECONOMICS DEPARTMENT, UNIVERSITY OF GHANA.

FACILITIES: ...........................................................
LOCATION: ............................................................
INTERVIEWER: ...........................................................
DATE OF INTERVIEW: ...........................................
RESPONDENT: ............................................................

1. How many workers do you have at this hospital?
   Doctors ...........................................
   Nurses .............................................
   Enrolled nurses .................................
   Health assistants .............................
   Daily employees .............................
   Number of wards ............................
   Number of beds .............................

b. Do all these people receive their salaries from the government?
c. Who receives housing allowance?
d. What other allowances are available?
   •
   •
   •

2. How many consultations are made on average in a day?
   Inpatient ........................................
   Outpatient ...................................

3. What are the common diseases often reported
   • ..............................................
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4. How much is paid on drugs for the following diseases
   Malaria ................................
   Diarrhea ............................
   Ante/post natal ............
   Immunization ............

5. For how long have user charges been in place? ..........
6. Perceived impact of charges on payers
   a. Increased attendance
   b. Drastic reduction in attendance
   c. Moderate reduction
   d. Insignificant reductions

7. Who are responsible for the collection of fees?

8. How much is charged for the following
   Card registration............................................
   Consultation.............................................
   Laboratory Tests.................................

9. Is part of the money collected retained here? YES/NO

10. What percentage is retained?.................................

11. What is it used for?

12. Are there provisions for the poor who cannot afford medical care? YES/NO

13. How much revenue is forgone due to these exemption policies?

14. Do you have all the equipments and facilities you need to work with (for example x-ray machines, enough hospital beds, laboratories, etc) at this place? Yes/No

15. What do you have to say about fees, would you want them to be increased further to meet all the demands of this hospital? YES/NO

16. What was the revenue target for last year?

17. Was this met?

18. Any reason for this?

19. What would the money have been used for? (In a situation where excess revenues were generated)
   a. Buy drugs and equipment
   b. Improve staff working conditions
   c. Pay outstanding debts.
20. Do you have problems with too many people using this facility? Yes/No

21. If yes, for how long has this been so? ..............

22. What do you think is the reason for this? .................................................................

23. Have user charges contributed to this in any way? ..........................................................

24. What is the effect? ........................................................................................................

25. Are you satisfied with working conditions at this particular hospital?

26. Supposing you personally owned this place, what changes would you make to improve upon performance here in terms of

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<td>Patients’ waiting time</td>
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<td>(Number of hours they spend here before seeing a doctor)</td>
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<td>Staff attitudes towards patients</td>
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<td>Amounts charged as fees.</td>
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27. Why do you think these changes you propose are not in place /happening now even though you are the one in charge? .................................................................
28. Outpatient utilisation

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29. Drugs
   a. How many drug kits do you receive each month?

      a. Does this arrive every month without fail?
      b. If yes, how long was it delayed
      c. Do you run out of some drugs before the next delivery?
      d. Which ones and how long does this take?

30. Transport facilities

<table>
<thead>
<tr>
<th>Facility</th>
<th>Total number</th>
<th>Number in use</th>
<th>Number broken down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor bikes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cars/lorries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambulances</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

31. FAMILY PLANNING.

<table>
<thead>
<tr>
<th>Stock at beginning of year</th>
<th>Deliveries during the year</th>
<th>Stock at the end of the year</th>
<th>Total consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

31. Do you ever run out of supplies? YES/NO

32. IMMUNISATION
a. BCG  
b. Polio  
c. DPT  
d. Measles  
e. TT

33. Needles received (dozens) ...........................................
Syringes.................................................................

34. TIME ALLOCATION

<table>
<thead>
<tr>
<th>Days of opening</th>
<th>Time: From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

35. Various services and the days they are available

<table>
<thead>
<tr>
<th>Activity</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenatal</td>
<td></td>
</tr>
</tbody>
</table>
QUESTIONNAIRE 2

THE IMPACT OF USER CHARGES ON UTILISATION OF HEALTH CARE FACILITIES IN GHANA: A CASE STUDY OF THE TEMA DISTRICT.

MPHIL THESIS
ECONOMICS DEPARTMENT, UNIVERSITY OF GHANA.

FACILITY LOCATION INTERVIEWER DATE OF INTERVIEW RESPONDENT

1. AGE....................................................................................................
2. SEX...MALE/FEMALE.
3. OCCUPATION.................................................................
4. Where do you live?..............................................................
5. How long have you been using this health facility?........................................................................
6. What is the distance from where you live to this place?.........................................................
7. What means of transport do you usually use?........................................................................
8. How much do you spend on transport?................................................................................
9. What is your total travel time?..................................................................................
10. What sickness are you suffering from?................................................................................
11. How long have you had this problem?................................................................................
12. Is this the first health care facility you are seeking treatment from for this particular treatment?
13. If no, where did you first go?
14. How much was charged for card registration and for drugs there?

<table>
<thead>
<tr>
<th>Card registration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Drugs</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

15. Were you referred from there to this place? YES/NO
16. How much have you paid here so far for registration and consultation?

17. Do you have any form of health insurance? YES/NO

18. So who takes care of your medical bills?

19. Do these medical bills affect other things in your family; say the payment of children’s school fees, etc?
20. How would you describe existing hospital charges
   • Cheap/alright
   • Moderate
   • High but manageable
   • Too high that it deters utilisation of facility.

21. In view of the above, what kind of cases will you take there?
   • All cases
   • Minor cases
   • Major cases

22. What would happen if the charges were doubled?
   • Stop using altogether
   • Continue as if nothing has happened
   • Take only major cases there

23. How much have you paid/anticipate to pay for drugs? ...........................................

24. Are the drugs available? YES/NO

25. If not, where do you get them?

26. What are your views concerning fees being charged at the hospital/clinic/health center?

27. Has this affected your number of consultations?.................................

28. What would you say about the way health workers treat patients here?

<table>
<thead>
<tr>
<th>Doctors</th>
<th>Excellent</th>
<th>Very good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

29. How long does it take you to see the doctor when you get here?

| Less than one hour |           |
| Between one and two hours |         |
| Over two hours |           |

30. How long would you want this to be? ........................................

31. How long do you stay with the doctor?.................................
32. Are you satisfied with this? YES/NO

33. What are your suggestions on this?

34. What other alternatives are available to you apart from these modern facilities?
   i. Private facilities
   ii. Traditional medicine
   iii. Delayed or incomplete treatment

35. What are your reasons for choosing these alternatives?

36. If the response to 35 is no, why have you stuck to the hospital?

37. Do treatments at the health centers meet your expectations? YES/NO.

38. What are your views on the following?

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of drugs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
QUESTIONNAIRE 3

IMPACT OF USER FEES ON THE UTILISATION OF HEALTH CARE FACILITIES IN GHANA: A CASE STUDY OF THE TEMSA DISTRICT

MPHIL THESIS

DEPARTMENT OF ECONOMICS, UNIVERSITY OF GHANA

1. Age of respondent: .....................................
2. Occupation/income of head of household: ..........................................................
3. Size of family: ........................................
4. Do you use public hospitals? YES/NO
5. How often do you (all members of the family) use these in a year? .........................
6. Who (age group) in the family often visit the place? ..........................................
7. What illness is commonly reported? .................................................................
8. Is it the first place you visit anytime you are ill? YES/NO
9. Why do you go there? ......................................................................................
10. If the answer to (8) is no, where do you go? .......................................................
11. Do you visit pharmacy shops and drug stores? YES/NO
12. When and why do you go there? .......................................................................  
13. Do you use private hospitals? YES/NO
14. Do you go to herbalists? YES/NO
15. How do you rank these in order of preference anytime you are ill? Public hospitals, private hospitals, drug stores, herbalists when you are ill?
16. How much do you spend on average when you visit the hospital? .........................
17. Is this expensive for you YES/NO
18. Does this affect other responsibilities of yours like payment of children's school fees, rent, electricity and water bills, etc? YES/NO.
19. Would you want the fees to be increased? YES/NO
20. What if the increases in fees is going to enable the hospital improve upon services like reducing waiting time, improving upon availability of drugs, etc, would you want the increase to be made? YES/NO

21. Up to how much are you willing to pay to make the above improvements possible? .................................................................

22. Have you heard about what exemptions are? YES/NO

23. What do you do when you are ill but have no money to visit the hospitals? ........................................................................................................

24. Have you heard about health insurance? YES/NO

25. Would you want it to be in place so that you can attend hospital free of charge anytime you are ill? YES/NO

26. Are you willing to contribute to this health insurance? YES/NO

27. How much are you willing to contribute a month?

<table>
<thead>
<tr>
<th>Up to $10,000</th>
<th>Up to $20,000</th>
<th>Up to $30,000</th>
<th>$30,000 and above</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX A

Table 5.1: Utilisation Levels in the District (1999-2001)

<table>
<thead>
<tr>
<th>Service</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Municipal</td>
<td>51328</td>
<td>52905</td>
<td>48478</td>
</tr>
<tr>
<td>TGH</td>
<td>30666</td>
<td>30784</td>
<td>25154</td>
</tr>
<tr>
<td>TPC</td>
<td>11539</td>
<td>11904</td>
<td>12297</td>
</tr>
<tr>
<td>ARHC</td>
<td>6835</td>
<td>6255</td>
<td>6830</td>
</tr>
<tr>
<td>MRHC</td>
<td>3208</td>
<td>4004</td>
<td>2993</td>
</tr>
<tr>
<td>KRHC</td>
<td>880</td>
<td>958</td>
<td>1204</td>
</tr>
</tbody>
</table>

Source: Tema Polyclinic Record Office

Table 5.2: Monthly Utilisation Rates at the KRHC (1999-2001)

<table>
<thead>
<tr>
<th>Month</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>272</td>
<td>304</td>
<td>600</td>
</tr>
<tr>
<td>February</td>
<td>286</td>
<td>333</td>
<td>350</td>
</tr>
<tr>
<td>March</td>
<td>322</td>
<td>273</td>
<td>350</td>
</tr>
<tr>
<td>April</td>
<td>459</td>
<td>268</td>
<td>388</td>
</tr>
<tr>
<td>May</td>
<td>225</td>
<td>323</td>
<td>815</td>
</tr>
<tr>
<td>June</td>
<td>321</td>
<td>427</td>
<td>546</td>
</tr>
<tr>
<td>July</td>
<td>486</td>
<td>627</td>
<td>670</td>
</tr>
<tr>
<td>August</td>
<td>397</td>
<td>368</td>
<td>680</td>
</tr>
<tr>
<td>Sept</td>
<td>412</td>
<td>406</td>
<td>559</td>
</tr>
<tr>
<td>October</td>
<td>352</td>
<td>437</td>
<td>685</td>
</tr>
<tr>
<td>November</td>
<td>257</td>
<td>559</td>
<td>559</td>
</tr>
<tr>
<td>December</td>
<td>326</td>
<td>344</td>
<td>526</td>
</tr>
</tbody>
</table>

Source: KRHC Records

Table 5.3: Attendance at Various Services at the TGH (1999-2001)

<table>
<thead>
<tr>
<th>Service</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternity</td>
<td>17043</td>
<td>25622</td>
<td>24658</td>
</tr>
<tr>
<td>Laboratory tests</td>
<td>32969</td>
<td>40152</td>
<td>44928</td>
</tr>
<tr>
<td>X-ray cases</td>
<td>-</td>
<td>4857</td>
<td>5233</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>-</td>
<td>5880</td>
<td>4534</td>
</tr>
</tbody>
</table>

Source: TGH Hospital Records
Figure 5.1 Showing Utilisation Levels in the Tema District (1999-2001)

Figure 5.2 Showing Utilisation Levels in the District (1999-2001)
### Table 5.4: Top 10 Diseases Reported in the District (2001)

<table>
<thead>
<tr>
<th></th>
<th>TGH (OPD alone)</th>
<th>TPC</th>
<th>ARHC</th>
<th>MRHC</th>
<th>KRHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>10.85%</td>
<td>Malaria 50%</td>
<td>Malaria 58.6%</td>
<td>Malaria</td>
<td>Malaria 64.9%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>9.42%</td>
<td>Skin diseases 10%</td>
<td>URTI 11.95%</td>
<td>Anaemia</td>
<td>Diarrhoea 13.3%</td>
</tr>
<tr>
<td>Pregnancy related</td>
<td>7.08%</td>
<td>URTI 6%</td>
<td>Skin diseases 8.9%</td>
<td>URTI</td>
<td>Skin diseases 8.9%</td>
</tr>
<tr>
<td>diseases</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>URTI 6.93%</td>
<td></td>
<td>Accidents 3%</td>
<td>Diarrhoea 6.18%</td>
<td>Hypertension</td>
<td>Hypertension 4.8%</td>
</tr>
<tr>
<td>Eye infections</td>
<td>6.72%</td>
<td>Diarrhoea 2.9%</td>
<td>Sexually transmitted diseases 4.4%</td>
<td>Occupational hazards</td>
<td>URTI 2.7%</td>
</tr>
<tr>
<td>Accidents 6.16%</td>
<td></td>
<td>Hypertension 2.8%</td>
<td>Oral cavity infections 4.2%</td>
<td>Diarrhoea</td>
<td>Rheumatic &amp; joint pains 0.98%</td>
</tr>
<tr>
<td>Gynaecological</td>
<td>Acute eye infection 2.6%</td>
<td>Hypertension 2.0%</td>
<td>Dog bites</td>
<td>Ear infection 0.9%</td>
<td></td>
</tr>
<tr>
<td>disorders 6.14%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin diseases</td>
<td>5.65%</td>
<td>Rheumatism 2.6%</td>
<td>Chicken pox 1.4%</td>
<td>Skin diseases</td>
<td>Measles 0.8%</td>
</tr>
<tr>
<td>Anaemia</td>
<td>5.24%</td>
<td>Ear infection 1.6%</td>
<td>Pregnancy related diseases 1.28%</td>
<td>Intestinal worms</td>
<td>Accidents 0.8%</td>
</tr>
<tr>
<td>Intestinal worms</td>
<td>5.22%</td>
<td>Pregnancy related diseases 1.1%</td>
<td>Ear infection 0.99%</td>
<td>Reproductive tract infections</td>
<td>Mumps 0.5%</td>
</tr>
</tbody>
</table>

Source: Records Departments of the Various Centres

### Table 5.5: The Total Amount of Money Spent on Exemptions at one Particular Facility

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>₦217,610,113.00</td>
</tr>
<tr>
<td>2000</td>
<td>₦283,784,882.00</td>
</tr>
<tr>
<td>2001</td>
<td>₦160,684,900.00</td>
</tr>
</tbody>
</table>

Source: Hospital’s 2001 annual report

### Table 5.6: OPD Attendances at the TGH by Ages (1999-2001)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Under 1</td>
<td>3376</td>
<td>3487</td>
<td>3190</td>
<td>3696</td>
<td>2316</td>
</tr>
<tr>
<td>1-4 years</td>
<td>4390</td>
<td>4206</td>
<td>4086</td>
<td>4574</td>
<td>2700</td>
</tr>
<tr>
<td>5-14 years</td>
<td>5311</td>
<td>5609</td>
<td>4947</td>
<td>6058</td>
<td>3545</td>
</tr>
<tr>
<td>15-44 years</td>
<td>20133</td>
<td>55454</td>
<td>22547</td>
<td>57432</td>
<td>21525</td>
</tr>
<tr>
<td>45-59 years</td>
<td>4671</td>
<td>5741</td>
<td>4942</td>
<td>6408</td>
<td>3946</td>
</tr>
<tr>
<td>60+</td>
<td>3125</td>
<td>3905</td>
<td>3201</td>
<td>4320</td>
<td>3003</td>
</tr>
<tr>
<td>Total</td>
<td>41006</td>
<td>78402</td>
<td>42913</td>
<td>82448</td>
<td>37035</td>
</tr>
</tbody>
</table>
Table 5.7 Top 10 Causes of Inpatient Admissions (TGH, 1999-2001)

<table>
<thead>
<tr>
<th>Diseases</th>
<th>1999 Number</th>
<th>1999 %</th>
<th>2000 Number</th>
<th>2000 %</th>
<th>2001 Number</th>
<th>2001 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>1092</td>
<td>11.67</td>
<td>910</td>
<td>8.64</td>
<td>1135</td>
<td>11.02</td>
</tr>
<tr>
<td>Anaemia</td>
<td>422</td>
<td>4.51</td>
<td>442</td>
<td>4.20</td>
<td>505</td>
<td>4.9</td>
</tr>
<tr>
<td>Accidents</td>
<td>552</td>
<td>5.90</td>
<td>527</td>
<td>5.0</td>
<td>565</td>
<td>5.49</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>397</td>
<td>4.24</td>
<td>421</td>
<td>4.0</td>
<td>569</td>
<td>5.52</td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td>350</td>
<td>3.74</td>
<td>315</td>
<td>2.99</td>
<td>369</td>
<td>3.58</td>
</tr>
<tr>
<td>Abortion</td>
<td>241</td>
<td>2.58</td>
<td>282</td>
<td>2.68</td>
<td>326</td>
<td>3.17</td>
</tr>
<tr>
<td>Hypertension</td>
<td>465</td>
<td>4.97</td>
<td>570</td>
<td>5.41</td>
<td>573</td>
<td>5.56</td>
</tr>
<tr>
<td>Hernia</td>
<td>128</td>
<td>1.37</td>
<td>-</td>
<td>0</td>
<td>201</td>
<td>1.95</td>
</tr>
<tr>
<td>Diabetes</td>
<td>178</td>
<td>1.90</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Convulsion</td>
<td>155</td>
<td>1.66</td>
<td>149</td>
<td>1.41</td>
<td>247</td>
<td>2.4</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>-</td>
<td>-</td>
<td>219</td>
<td>2.08</td>
<td>260</td>
<td>2.52</td>
</tr>
<tr>
<td>Appendicitis</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>0.95</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>5375</td>
<td>57.46</td>
<td>6800</td>
<td>62.65</td>
<td>5549</td>
<td>53.88</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9355</strong></td>
<td><strong>100</strong></td>
<td><strong>10535</strong></td>
<td><strong>100</strong></td>
<td><strong>10299</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 5.8 Totals of Outpatient Cases Reported at the TGH (1999-2001)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN</td>
<td>2958</td>
<td>5877</td>
<td>3380</td>
<td>7158</td>
<td>3952</td>
<td>7205</td>
</tr>
<tr>
<td>FEB</td>
<td>3132</td>
<td>8438</td>
<td>3165</td>
<td>5926</td>
<td>3407</td>
<td>7142</td>
</tr>
<tr>
<td>MAR</td>
<td>3114</td>
<td>7146</td>
<td>2390</td>
<td>3999</td>
<td>3807</td>
<td>7004</td>
</tr>
<tr>
<td>APR</td>
<td>2829</td>
<td>8067</td>
<td>2973</td>
<td>5629</td>
<td>3229</td>
<td>6656</td>
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<td>6157</td>
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<td>6549</td>
<td>3684</td>
<td>11483</td>
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<td>6888</td>
<td>3879</td>
<td>6889</td>
<td>2917</td>
<td>7269</td>
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<tr>
<td>JUL</td>
<td>4026</td>
<td>6574</td>
<td>3928</td>
<td>8553</td>
<td>3015</td>
<td>7909</td>
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<tr>
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<td>2038</td>
<td>3829</td>
<td>3780</td>
<td>8633</td>
<td>1995</td>
<td>4156</td>
</tr>
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<td>6805</td>
<td>2980</td>
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<td>2457</td>
<td>5652</td>
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<td>2744</td>
<td>4681</td>
<td>3583</td>
<td>7559</td>
<td>3506</td>
<td>6990</td>
</tr>
<tr>
<td>NOV</td>
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<td>5795</td>
<td>3404</td>
<td>6646</td>
<td>3211</td>
<td>8567</td>
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<tr>
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<td>5454</td>
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<td>2050</td>
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</table>

Table 5.9 Inpatient Records at the TGH (1999-2001)

<table>
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<tr>
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<th></th>
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</tr>
</thead>
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<td>JAN</td>
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<td>553</td>
<td>247</td>
<td>561</td>
<td>233</td>
<td>454</td>
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<td>FEB</td>
<td>224</td>
<td>521</td>
<td>239</td>
<td>571</td>
<td>196</td>
<td>535</td>
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<td>MAR</td>
<td>226</td>
<td>594</td>
<td>214</td>
<td>615</td>
<td>190</td>
<td>654</td>
</tr>
<tr>
<td>APR</td>
<td>214</td>
<td>668</td>
<td>208</td>
<td>688</td>
<td>160</td>
<td>509</td>
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<tr>
<td>MAY</td>
<td>263</td>
<td>750</td>
<td>237</td>
<td>749</td>
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<td>741</td>
<td>243</td>
<td>781</td>
<td>230</td>
<td>754</td>
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<tr>
<td>JUL</td>
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<td>711</td>
<td>293</td>
<td>711</td>
<td>239</td>
<td>621</td>
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<tr>
<td>AUG</td>
<td>182</td>
<td>389</td>
<td>278</td>
<td>645</td>
<td>131</td>
<td>263</td>
</tr>
<tr>
<td>SEPT</td>
<td>300</td>
<td>526</td>
<td>251</td>
<td>605</td>
<td>237</td>
<td>524</td>
</tr>
<tr>
<td>OCT</td>
<td>287</td>
<td>596</td>
<td>209</td>
<td>605</td>
<td>215</td>
<td>548</td>
</tr>
<tr>
<td>NOV</td>
<td>276</td>
<td>594</td>
<td>221</td>
<td>585</td>
<td>230</td>
<td>597</td>
</tr>
<tr>
<td>DEC</td>
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<td>504</td>
<td>-</td>
<td>-</td>
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<td>638</td>
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</table>
Table 5.10 Utilisation Statistics for the KRHC (1999-2001)

<table>
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<tr>
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<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>JAN</td>
<td>90</td>
<td>182</td>
<td>111</td>
</tr>
<tr>
<td>FEB</td>
<td>96</td>
<td>190</td>
<td>115</td>
</tr>
<tr>
<td>MAR</td>
<td>108</td>
<td>214</td>
<td>92</td>
</tr>
<tr>
<td>APR</td>
<td>55</td>
<td>404</td>
<td>101</td>
</tr>
<tr>
<td>MAY</td>
<td>85</td>
<td>140</td>
<td>118</td>
</tr>
<tr>
<td>JUN</td>
<td>117</td>
<td>204</td>
<td>151</td>
</tr>
<tr>
<td>JUL</td>
<td>186</td>
<td>300</td>
<td>284</td>
</tr>
<tr>
<td>AUG</td>
<td>125</td>
<td>272</td>
<td>112</td>
</tr>
<tr>
<td>SEPT</td>
<td>130</td>
<td>282</td>
<td>127</td>
</tr>
<tr>
<td>OCT</td>
<td>106</td>
<td>246</td>
<td>145</td>
</tr>
<tr>
<td>NOV</td>
<td>114</td>
<td>143</td>
<td>150</td>
</tr>
<tr>
<td>DEC</td>
<td>111</td>
<td>215</td>
<td>96</td>
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Table 5.11 Utilisation by Ages (TPC, 1999-2001)

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<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-11 months</td>
<td>3370</td>
<td>5375</td>
<td>4848</td>
</tr>
<tr>
<td>1-4 years</td>
<td>7341</td>
<td>8465</td>
<td>8823</td>
</tr>
<tr>
<td>5-14 years</td>
<td>6787</td>
<td>8220</td>
<td>9683</td>
</tr>
<tr>
<td>15-44 years</td>
<td>23579</td>
<td>26979</td>
<td>30291</td>
</tr>
<tr>
<td>45-59 years</td>
<td>4469</td>
<td>4946</td>
<td>6218</td>
</tr>
<tr>
<td>60+</td>
<td>2576</td>
<td>3232</td>
<td>3268</td>
</tr>
<tr>
<td>Total</td>
<td>48122</td>
<td>57217</td>
<td>63131</td>
</tr>
</tbody>
</table>

Table 5.12 Utilisation by age and sex at the TPC (2001)

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-11 MONTHS</td>
<td>2536</td>
<td>2312</td>
</tr>
<tr>
<td>1-4 YEARS</td>
<td>4507</td>
<td>4316</td>
</tr>
<tr>
<td>5-14 YEARS</td>
<td>4628</td>
<td>5055</td>
</tr>
<tr>
<td>15-44 YEARS</td>
<td>8921</td>
<td>21370</td>
</tr>
<tr>
<td>45-59</td>
<td>2122</td>
<td>4096</td>
</tr>
<tr>
<td>60+</td>
<td>1077</td>
<td>2191</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23791</td>
<td>39340</td>
</tr>
</tbody>
</table>
Figure 5.3 showing utilisation levels for the KRHC (1999-2001)

Figure 5.4 Illustrating the statistics for KRHC (1999-2001)

Table 5.13 Showing utilisation levels for the TPC (1999-2001)

<table>
<thead>
<tr>
<th>TPC</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-11month</td>
<td>3370</td>
<td>5375</td>
<td>4848</td>
</tr>
<tr>
<td>1-4yrs</td>
<td>7341</td>
<td>8465</td>
<td>8823</td>
</tr>
<tr>
<td>5-14yrs</td>
<td>6787</td>
<td>8220</td>
<td>9683</td>
</tr>
<tr>
<td>15-44yrs</td>
<td>23579</td>
<td>26979</td>
<td>30291</td>
</tr>
<tr>
<td>45-59yrs</td>
<td>4469</td>
<td>4946</td>
<td>6218</td>
</tr>
<tr>
<td>60+</td>
<td>2576</td>
<td>3232</td>
<td>3268</td>
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</table>
Figure 5.5 Showing utilisation levels at the TPC (1999-2001)
### APPENDIX B: RESULTS

#### Table 5.1B Use of public hospitals

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>48</td>
<td>28.9</td>
<td>29.1</td>
</tr>
<tr>
<td>Yes</td>
<td>117</td>
<td>70.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
<td>99.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>1</td>
<td>.6</td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

#### Table 5.2B Commonly reported illness

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria/fever</td>
<td>134</td>
<td>80.7</td>
<td>82.2</td>
</tr>
<tr>
<td>Cold</td>
<td>5</td>
<td>3.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Typhoid</td>
<td>2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Others</td>
<td>22</td>
<td>13.3</td>
<td>13.5</td>
</tr>
<tr>
<td>Total</td>
<td>163</td>
<td>98.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
<td>100.0</td>
<td></td>
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</table>

#### Table 5.3B Is it the first place you visit when ill?

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>86</td>
<td>51.8</td>
<td>52.1</td>
</tr>
<tr>
<td>Yes</td>
<td>79</td>
<td>47.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
<td>99.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>1</td>
<td>.6</td>
</tr>
<tr>
<td>Total</td>
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<td></td>
</tr>
</tbody>
</table>

#### Table 5.4B Reason for going there

<table>
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<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used to the place</td>
<td>21</td>
<td>12.7</td>
<td>14.0</td>
</tr>
<tr>
<td>Cheaper costs</td>
<td>46</td>
<td>27.7</td>
<td>30.7</td>
</tr>
<tr>
<td>Near</td>
<td>20</td>
<td>12.0</td>
<td>13.3</td>
</tr>
<tr>
<td>Good services/appropriate referral</td>
<td>35</td>
<td>21.1</td>
<td>23.3</td>
</tr>
<tr>
<td>system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>28</td>
<td>16.9</td>
<td>18.7</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>90.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
<td>16</td>
<td>9.6</td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
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### Table 5.5B Alternatives to public hospitals

<table>
<thead>
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<th>Frequency</th>
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<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>36</td>
<td>21.7</td>
<td>43.4</td>
</tr>
<tr>
<td>Drug stores</td>
<td>47</td>
<td>28.3</td>
<td>56.6</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>50.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>83</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
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<td></td>
</tr>
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### Table 5.6B Do you use drug stores?

<table>
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<th>Cumulative Percent</th>
</tr>
</thead>
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</tr>
<tr>
<td>No</td>
<td>5</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Yes</td>
<td>160</td>
<td>96.4</td>
<td>97.0</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
<td>99.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>1</td>
<td>.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
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### Table 5.7B Reasons for choosing alternative places

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<th>Cumulative Percent</th>
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<td></td>
<td></td>
</tr>
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<td>Minor illness</td>
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<td>61.8</td>
</tr>
<tr>
<td>Cheaper costs</td>
<td>18</td>
<td>10.8</td>
<td>10.9</td>
</tr>
<tr>
<td>Just to buy prescribed drugs</td>
<td>39</td>
<td>23.5</td>
<td>23.6</td>
</tr>
<tr>
<td>Convenience</td>
<td>6</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
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<td>99.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>1</td>
<td>.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
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### Table 5.8B Is this expensive for you?

<table>
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<th>Frequency</th>
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<th>Cumulative Percent</th>
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</thead>
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<td></td>
</tr>
<tr>
<td>No</td>
<td>48</td>
<td>28.9</td>
<td>29.1</td>
</tr>
<tr>
<td>Yes</td>
<td>117</td>
<td>70.5</td>
<td>70.9</td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
<td>99.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>1</td>
<td>.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
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<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
### Table 5.9B Does this affect other responsibilities?

<table>
<thead>
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<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
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<td>20.6</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>131</td>
<td>78.9</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>165</td>
<td>99.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>System</td>
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<td>.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>166</td>
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<td></td>
</tr>
</tbody>
</table>

### Table 5.10B Attitude when ill but have no money

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visit drug stores</td>
<td>46</td>
<td>27.7</td>
<td>27.9</td>
<td>27.9</td>
</tr>
<tr>
<td>Borrow money and go</td>
<td>52</td>
<td>31.3</td>
<td>31.5</td>
<td>59.4</td>
</tr>
<tr>
<td>Stay at home</td>
<td>54</td>
<td>32.5</td>
<td>32.7</td>
<td>92.1</td>
</tr>
<tr>
<td>Use traditional medicine</td>
<td>5</td>
<td>3.0</td>
<td>3.0</td>
<td>95.2</td>
</tr>
<tr>
<td>Always has money</td>
<td>6</td>
<td>3.6</td>
<td>3.6</td>
<td>98.8</td>
</tr>
<tr>
<td>Company sponsored</td>
<td>2</td>
<td>1.2</td>
<td>1.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
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