The Effect of Cost Sharing on Management, Financing and Delivery of Primary Health Care Services in Tanzania: With Particular Reference to Outpatient Services in Public District Hospitals in Morogoro and Tanga Regions.

By

Jackton J.L. Kaijage

and

Flavian N. Ruge

Study Project Coordinated

by

Eastern and Southern African Universities Research Programme (ESAURP),

Dar es Salaam,

June, 1997

Abbreviations

DANIDA	-	Danish International Development Agency
DED	-	District Executive Director
DMO	-	District Medical Officer(s)
EDP	-	Essential Drugs Programme
EPI	-	Expanded Programme for Immunisation, Tanzania
GDP	-	Gross Domestic Product
GNP	-	Gross National Product
HESAWA	-	Health Sanitation and Water
MCH	-	Maternal and Child Health
MCHA	-	Maternal and Child Health Aid
NGOs	-	Non-Governmental Organisations
PHC	-	Primary Health Care
PMO	-	Prime Ministers Office
SIDA	-	Swedish International Development Authority
TFNC	-	Tanzania Food and Nutrition Centre
UNICEF	-	United Nations Children's Fund
WHO	-	World Health Organisation

Acknowledgement

Any study project is always the product of many sources. A number of people and institutions helped with this work thus we wish to acknowledge and thank them in the following manner. Firstly, we are indebted to many sources of influence on our thinking most notably to the writings of those who have preceded us in this field and whose works are noted throughout this contribution.

Secondly, we are very grateful to the Eastern and Southern African Universities Research Programme (ESAURP) from which the financial support and coordination of the study were obtained.

Thirdly, to single out a few individuals, we wish to acknowledge the technical and logistical assistance we were given by the following persons: Prof. T.L. Maliyamkono, The Executive Director, ESAURP; Mr. Phares Mujinja, The Health Economist, the Department of Behavioural Science, Muhimbili University College of Health Sciences; Mr. Peter Ilomo The Head, Implementation Team on Cost Sharing, Ministry of Health; Regional Medical Officers for Morogoro and Tanga regions; District Medical Officers for Handeni, Kilosa, Korogwe and Ulanga districts; Medical Officers Incharge for Kwiro Mission dispensary, Ulanga; St. Francis Mission Hospital Kwamkono, Handeni,
St. Raphael's Mission Hospital, Korogwe; and Usagara Private dispensary, Kilosa and Mr. John Kyaruzi (the data analyst).

Lastly, particular appreciation is extended to the study respondents and our research assistants whose cooperation made this study project a success.

Executive Summary

This paper presents empirical results obtained after carrying out a cross-sectional study, coordinated by the Eastern and Southern African Universities Research Programme (ESAURP), which broadly set out to explore the relationship between the introduction of cost sharing and the management, financing and delivery of primary health care services in public district hospitals in Tanzania. Particular reference, however, was heavily placed to outpatient services in public district hospitals in Morogoro and Tanga regions. The aim of this presentation, therefore, is to draw conclusions on:

a) The relationship between the management of outpatient services in public district hospitals before and after the introduction of cost sharing;

b) The relationship between the financing position of outpatient services in public district hospitals before and after the introduction of cost sharing;

c) The relationship between the delivery of outpatient services in public district hospitals before and after the introduction of cost sharing; and

d) Other factors than the introduction of cost sharing that affect outpatient services management, financing and delivery in public district hospitals.

Ultimately, the paper gives directions by recommending measures which can best address the identified problems of effective management, financing and delivery of outpatient services in public district hospitals in terms of equity and sustainability.

For the empirical results obtained to be clearly understood, the following were the essentials. Utilization of outpatient services (basic curative and preventive services) was the dependent variable. This was basically referred to as the annual total number of: outpatients made visits at each hospital consulted for basic curative services; homes delivered with health education; underfives whose growth rate was monitored using the growth chart; and pregnant women received antenatal care during pregnancy. As such, the level of utilization per hospital before and after the introduction of cost sharing in public district hospitals was determined by analyzing the hospital performance data collected using the Health Facility Questionnaire. Explanatory variables, on the other hand,

comprised affordability, quality, access and equity variables plus individual and household characteristics. These were determined by analyzing outpatients and household heads data which was obtained using Outpatient and Household Head Questionnaires. For the study population sample to be representative two objective sampling methods were used. The stratified random sampling and the systematic sampling methods. The data obtained was analyzed using the SPSS package and descriptive statistical analysis. Summary sheets were used to analyze manually data obtained using open-ended questions. The SPSS package was also used to test the three hypotheses which were set to guide the study using a paired t-test. In this regard, however, a word of caution should be given. Since there was no any hospital that was able to provide information on contributions made by each source of funds for the two periods (1991/92 - 1992/93 and 1993/94 - 1994/95) the study could not determine in measurable terms the relationship between the financing position of outpatient services in public district hospitals before and after introduction of cost sharing. As a result, the second hypothesis was not tested using a paired t-test. Instead simple descriptive statistical analysis was made.

Test results for the first hypothesis which was set to determine the relationship between management of outpatient services in public district hospitals before and after the introduction of cost sharing reveal there was no significant difference. Hence the management of outpatient services in public district hospitals even after the introduction of cost sharing is not yet improved. This is because public hospitals as opposed to private hospitals lack autonomy which in turn can enable them to ensure, among other things, their charging system reflects both the buying prices per supply dispensed. There is also poor supervision over user fees collection and expenditure. In these hospitals there is inadequate supply of essential supplies e.g. drugs on a regular basis and their control. Poor staff salaries which do not take into account risks they are exposed to during work is another contributing factor. There is too much bribery in public district hospitals and some of the staff have bad attitude towards patients.

With the second hypothesis, although the results obtained seem to conclude that there has been a slight notable improvement in the financing position of outpatient services in public district hospitals, yet in practice this conclusion becomes questionable. This is because there is revenue

loss in public district hospitals due to automatic exemptions, the used rigid charging system and through poor supervision over user fees collection and expenditure. Also meagre budget is still allocated to public district hospitals.

Test results for the third hypothesis which was used to determine the relationship between the delivery of outpatient services in public district hospitals before and after the introduction of cost sharing reveal there was no significant difference. Hence the delivery of outpatient services in public district hospitals even after the introduction of cost sharing is not improved yet. This conclusion is justified by a fall by 5% of outpatients attendance for basic curative services in public district hospitals. But for preventive services which are entirely delivered free of charge to pregnant women and children under five years old in public hospitals there has been an increase in the annual total number of outpatients delivered with these services.

The fall of outpatients attendance for basic curative services in public district hospitals is associated with: lack of essential supplies and equipment and their control especially drugs; too much bribery in that 'no money no care'; unaffordable user fees and bad attitude towards patients among some staff.

Although the results obtained reveal that charged user fees are affordable, yet the average monthly income earned by outpatients and household heads interviewed makes this conclusion questionable. The quality of delivered outpatient services in public district hospitals has remained either constant or decreased. And with too much bribery in the midst of inadequate supply of essential supplies in public district hospitals, delivered outpatient services are both inaccessible and not equitable.

For the management, financing and delivery of outpatient services in public district hospitals to be effectively improved in terms of equity and sustainability:

- Public district hospitals should run themselves for more autonomy.
- There must be strict supervision over user fees collection and expenditure.

- Essential supplies and equipment should be in place on a regular basis and these should be properly controlled.
- Staff salaries should be increased taking into consideration risks they are exposed to during work.
- Dishonest staff should be fired immediately.
- Only caring staff should be appointed.
- Since chronic diseases are too expensive to treat, sufferers must contribute part of the total cost.
- The used charging system should reflect both the buying price(s) per supply dispensed and the type of disease attended.
- Number of outpatient services charged for should be increased.
- Budget allocated to public district hospitals should be increased.
- Exemptions should be granted on proven grounds.

Table of Contents

Page

List of Tables

Page

1. Background to The Study

1.1 The Problem:

As shown in Appendix A, the United Republic of Tanzania comprises of the Mainland and the two islands of Zanzibar and Pemba. It covers a total square of 945,000 Km. It is situated on the Eastern Coast of Africa. Administratively it is divided into 20 regions which are further subdivided into 106 districts. Its population in 1988 was 23.2 million with an annual growth rate of 2.8%. Hence its current population is estimated to be 27 million[1].

The country has a mixed economy with the agricultural sector playing the leading role in that the primary export commodities include coffee, sisal, cotton and diamonds. Since the country has a Gross National Product per head (GNP) of US $ 100.00 and an inflation rate of 30% the World Bank[2] has ranked Tanzania the second poorest country in the world.

Before independence, health services (mainly curative) were established in urban areas due to the colonial government attention to these areas. However, after independence in 1961, health service plans were considered to be an integral part of the overall national development plans. To this end, the first section on health was approved by the government during the First Five Year Plan (1964-1969). The goal of this section was to establish regional hospitals which had to provide specialist and surgical medical care in all regions although the emphasis was placed on improving hygiene, environmental sanitation and child nutrition[3].

The Second Five Year Plan, (1969-1974)[4] which was developed after the 1967 Arusha Declaration, put much emphasis on the self-reliance policy, equity and accessibility to various social services throughout the country. Due to this shift, the delivery of health services was geared to preventive services like elimination of the major infectious diseases e.g. leprosy. In order to realise this move the government during this plan period intended to construct 80 new health centres and 100

dispensaries per subsequent five year plan the target being one health centre per every 50,000 people and one dispensary for every 10,000 people by the year 1985.

The Third Five Year Plan (1976-1981)[5] on the other hand aimed at providing clean water and health services in urban and rural areas. These objectives were vital in implementing the primary health care (PHC) approach which was internationally declared in 1978 in Alma Alta. However, in Tanzania the approach had been adopted since 1972[6,7] due to the fact that the decentralisation of the government in 1972 and 1975 provided new opportunities to reach and involve the majority of the people in the country. It was during this plan period that the Ministry of Health (MOH) began to cooperate with other sectors in implementing PHC through Multisectoral PHC Committees. It was in 1983 that MOH issued guidelines on how to implement PHC.

Since the implementation of PHC programme is done by various sectors including regional and local governments, voluntary agencies, parastatals and the private sector, District PHC Committees are the ones responsible for preparing district health plans. The District Medical Officer (DMO) at this level is the PHC Manager responsible for the co-ordination and supervision of all health activities in the district assisted by the district health management team. He/she is also the warrant holder of the health fund. At the national level the PHC Steering Committee provides guidelines for PHC programmes implementation at all levels.

Following he adoption of the World Health Organisation Alma-Alta declaration of Health for All by the Year 2000, Tanzania witnessed a massive expansion of the public health sector particularly in peripheral areas (See Appendix B). Consequently, the number of such workers as Medical Assistants and Rural Medical Aides increased tenfold while the number of doctors increased three times[8]. With these developments in the health sector, over the years Tanzania was able to develop a strong and comprehensive health care delivery system going right to the village level. Village health services, dispensary services and rural health centres form the lowest levels of health care delivery at the village or peripheral level, whereas district hospitals form a very important element at the

district level in that they offer referral services to village health services and it is at this level that national policy on PHC is put into practice[9]. At regional level, regional hospitals form another element in the national health system offering similar services to those provided at the district level with additional specialised services. Referral/consultant hospitals and MOH form the highest level of hospital services at the central level. These facilities are meant to provide referral and specialised health care on a zonal basis throughout the country[10,11].

Alongside these public health services, PHC programmes have been operationalised through health services delivered by other approved bodies including voluntary agencies and religious organisations; parastatal organisations; private health care services and traditional healers[12].

As a result of these efforts, **health status indicators** had improved by early 1990 as revealed in Appendix C although the indicators are still similar to those in other poor countries. Life expectancy at birth was 54 years whereas the Infant Mortality Rate was 104 per 1000 live births and the Underfive Mortality Rate was 176 per 1000 [13]. Maternal Mortality Rate, on the other hand, ranges between 200 and 400 per 100,000 live births in different regions[14]. From the diagnosis of outpatient statistics reported by 20 districts in Tanzania mainland in 1995, top ten diseases making very significant contribution to the country mortality for all ages include: malaria; URTI; diarrhoeal diseases; eye infections; pneumonia; intestinal worms; skin infections; pregnancy-normal; minor surgery; and urinary tract infections in that order [15].

Also as revealed in Appendix D there has been a steady increase in the number of both outpatients and inpatients using available health care services between 1980 and 1994. While the number of outpatient attendances in public hospitals, rural health centres and dispensaries had increased by 44.6%, 36.5% and 66.4% respectively, inpatient attendances in public hospitals, rural health centres and dispensaries had increased by 38.9%, 50.6% and 49.0% respectively during this period.

As for the funding of the above mentioned health services, the following arrangements have been being used since independence[16-20]. The central government has been the main contributor of funds to the public health sector in two main ways. Through MOH, referral/consultant hospitals, medical schools, all MOH parastatals e.g. Tanzania Food and Nutrition Centre (TFNC) and designated hospitals owned by religious organisations have been being funded, whereas through the Prime Minister's Office (PMO), funds have been being made available for running regional and district hospitals: especially for their employees' salaries. Subventions have also been being offered through PMO to local councils for health centres' and dispensaries' personnel salaries. Local governments which normally get their funds from local taxes and subventions offered by the central government, have been providing funds to dispensaries and rural health centres for purchasing medicine and equipment, salaries, training and development of their employees, and construction and maintenance of these district hospitals.

Voluntary agencies and religious bodies form another source of funds required to run health care services particularly in rural areas. These organisations not only depend on subsidies they receive from the central government but they also obtain funds through user charges and their parent organisations overseas.

Funds also flow in through donors like the Danish International Development Agency (DANIDA), Swedish International Development Authority (SIDA), World Health Organisation (WHO), the United Nations Children's Fund (UNICEF) etc. In fact in early 1980s[21] donor funding was estimated to account for about 70% of the development budget. This contribution was primarily made in support of rural health services. Other ways used by donors include provision of funds in support of PHC programmes e.g. the Essential Drugs Programme (EDP), AIDS Control and Family Planning. They also provide experts, medical equipment and medicines. Contributions are also made by private employers, non-governmental organisations (NGOs), and some parastatals. For the period 1992/93 Tanzania's total health expenditure as a percent of the Gross domestic Product (GDP) was 8.5% of which 2.5% was contributed by the government, 2.7% was

contributed by donors whereas private sources contributed 3.3% [22]. However, with the poor economic performance which Tanzania experienced during 1980s there was a serious decline in social sector spending and in the living standards of its population. A number of factors contributed towards this situation. They included drought, war with Uganda in the late 1970s, the break-up of the then East African Community, increased price of oil and other imports, the steady decline of the Tanzanian Shilling against the US dollar, inflation, reduction in domestic production and the present economic recession.

In aftermath of this situation the recurrent cost needs of the extensive health infrastructure which had been established became increasingly difficult to be met owing to declining public expenditure on health. As a result operationalising the PHC strategy in Tanzania also became difficult in terms of coverage and equity; health resources; facilities and finances; and in terms of delivery of services[23]. Broadly speaking, these problems are of three kinds: managerial, financial and constraints associated with the delivery of available services.

In terms of management of PHC programmes, a number of constraints have been experienced. Multisectoral co-operation is still difficult to realise in that PHC Committees, where they are existing, tend to meet irregularly and committee members also are not fully aware of their roles in these committees. Inadequate resources including manpower and means of transport have limited efficient management of PHC programmes in several regions, districts and peripheral health services. The tendency of posting Maternal and Child Health Aids (MCHA) to hospitals or town councils have for instance, caused maldistribution of MCHA, whereas supervision of peripheral health services has also been limited due to lack of sufficient and reliable means of transport. The Expanded Programme for Immunisation (EPI) vehicles are the only available and reliable means for ferrying EPI and EDP supplies and for use by district Maternal and Child Health (MCH) Co-ordinators for supervision. In addition to these constraints, most DMO and their teams not only lack the skills they require in

maintaining the scarce resources and supplies at their disposal, but they also lack adequate information management skills they require in using locally generated health information for improved delivery of services. Besides that, due to structural problems DMO's power to hire and/or fire any staff and to have control over funds granted by the central government for running rural health services is limited. This latter constraint proceeds from the DMO's duality of responsibility to MOH and to the District Executive Director (DED). Although the DMO is the district PHC Manager responsible for the district hospital and rural health services, administratively the district hospital is under the central government, yet the rural health services are under the district councils. Consequently there has been lack of transparency, and the way information on financial flows and use are spread across many authorities and actors does not lend itself easily to control and accountability [24].

Financially, Tanzania used to provide to the people free health care in government run facilities and subsidised health care in district hospitals under voluntary organisations funded by the central government. This means that the funding of these services has been very much dependent on the budgetary allocation to the health sector from central government funds. Such resources are scarce and have been declining over the years as evidenced by the declining share of the government budget allocated to the health sector falling from 7.1% in 1976 to 3.7% in 1986/87[25]. There has also been a decline in the recurrent budget in real terms. In actual fact the real per capita government expenditure on health declined by 460% between 1978/79 and 1988/89. Of todate Tanzania is estimated to expend a total health expenditure of US $7.34 per capita yearly [26]. The financing of PHC programmes becomes even worse when inequity exists in resources allocation between interventions Tanzania like other countries in the Eastern African zone have health care budget weighted heavily to curative services overall accounting more than half of the total health spending. Whilst community interventions absorb 10.7%, preventive services account for 32.2%. The remaining 57.1% is received by curative interventions[26].

However an entire dependence on donor support by key PHC programmes threatens sustainability of established programmes in that once this support is withdrawn, the programmes are likely to collapse. Misuse of allocated funds at district level is another constraint that has been experienced. District councils instead of using full grants given by the central government as directed they tend to use allocated funds for other programmes than PHC programmes. As put by Mogedal, Steen and Mpelumbe [24], an extremely weak local financial base in Tanzania, makes the District Councils very dependent on transfer of central government resources and donor funds.

This financing position has had some serious implications for the whole health sector. The health system has been starved not only of the requisite number of trained health professionals, facilities and equipment but also of essential drugs coupled with rapidly disintegrating hospitals, rural health centres and dispensaries buildings. Another related consequence has been poor remuneration and lack of incentives for health professionals resulting in low morale and motivation.

Although there are some good examples of community involvement in the delivery of available PHC services e.g. in the Health, Sanitation and Water (HESAWA) a lot remains to be done in an effort to mobilise the general public to take informed health actions. Also owing to the dependence syndrome, individual donors' conditions tend to spark off the problem of verticality which hinders all efforts geared to integrating various PHC programmes initiatives. Hence there is unnecessary and uneconomic duplication of efforts and the waste of resources available[27].

In an effort to rectify this situation a number of steps have been taken and some are still underway. From the PHC stand point the plan was underway to launch a new PHC strategy in the early 1990s which would be based on: community involvement; intrasectoral collaborations; multisectoral collaboration; district health services; community-based health care and appropriate technology[27]. Also major reforms in the health sector were initiated in the early 1990s. Although the government was still strongly committed to its egalitarian role of delivering free equitable and accessible health

services it became aware of the need to effect change in financing public health services. As a result, a public/private mix in health care provision and financing was encouraged by lifting the ban on private practice in the delivery of health services. This new move as shown in Appendix E led to the rapid expansion of private district hospitals especially in urban areas.[28]. Another step has been the decision to abandon the policy of offering free health care at referral/consultant hospitals, regional hospitals and district hospitals by introducing cost sharing through user charges in public district hospitals in 1994 as part of the national programme to recover health sector costs[28]. Nevertheless for the delivery of health services in public district hospitals to guarantee equity exemptions were to be given to patients with AIDS, cancer, and inpatients suffering from mental illness, tuberculosis and leprosy. All preventive services are also exempted from paying user charges. Full exemption is also granted on grounds of poverty[29]. In this context, the main problem which this study sought to address was to provide a definite answer to the question: **"Does the introduction of cost sharing in public district hospitals in Tanzania affect the management, financing and delivery of primary health care services in these hospitals?"**

1.2 LITERATURE REVIEW

Although the adoption of PHC strategy since the late 1970s was received as a way forward to ensuring equity and guaranteeing sustainability of delivered health services particularly to those in greatest need, several studies in other countries have identified various problems which threaten to wipe out the remarkable achievements which were made during the first decade after PHC implementation. For the purpose of this study, we will address ourselves to managerial, financial and constraints related to health services utilization that proceed from implementing the policy of cost sharing in public hospitals in particular.

However an entire dependence on donor support by key PHC programmes threatens sustainability of established programmes in that once this support is withdrawn, the programmes are likely to collapse. Misuse of allocated funds at district level is another constraint that has been experienced. District councils instead of using full grants given by the central government as directed they tend to use allocated funds for other programmes than PHC programmes. As put by Mogedal, Steen and Mpelumbe [24], an extremely weak local financial base in Tanzania, makes the District Councils very dependent on transfer of central government resources and donor funds.

This financing position has had some serious implications for the whole health sector. The health system has been starved not only of the requisite number of trained health professionals, facilities and equipment but also of essential drugs coupled with rapidly disintegrating hospitals, rural health centres and dispensaries buildings. Another related consequence has been poor remuneration and lack of incentives for health professionals resulting in low morale and motivation.

Although there are some good examples of community involvement in the delivery of available PHC services e.g. in the Health, Sanitation and Water (HESAWA) a lot remains to be done in an effort to mobilise the general public to take informed health actions. Also owing to the dependence syndrome, individual donors' conditions tend to spark off the problem of verticality which hinders all efforts geared to integrating various PHC programmes initiatives. Hence there is unnecessary and uneconomic duplication of efforts and the waste of resources available[27].

In an effort to rectify this situation a number of steps have been taken and some are still underway. From the PHC stand point the plan was underway to launch a new PHC strategy in the early 1990s which would be based on: community involvement; intrasectoral collaborations; multisectoral collaboration; district health services; community-based health care and appropriate technology[27]. Also major reforms in the health sector were initiated in the early 1990s. Although the government was still strongly committed to its egalitarian role of delivering free equitable and accessible health

services it became aware of the need to effect change in financing public health services. As a result, a public/private mix in health care provision and financing was encouraged by lifting the ban on private practice in the delivery of health services. This new move as shown in Appendix E led to the rapid expansion of private district hospitals especially in urban areas.[28]. Another step has been the decision to abandon the policy of offering free health care at referral/consultant hospitals, regional hospitals and district hospitals by introducing cost sharing through user charges in public district hospitals in 1994 as part of the national programme to recover health sector costs[28]. Nevertheless for the delivery of health services in public district hospitals to guarantee equity exemptions were to be given to patients with AIDS, cancer, and inpatients suffering from mental illness, tuberculosis and leprosy. All preventive services are also exempted from paying user charges. Full exemption is also granted on grounds of poverty[29]. In this context, the main problem which this study sought to address was to provide a definite answer to the question: **"Does the introduction of cost sharing in public district hospitals in Tanzania affect the management, financing and delivery of primary health care services in these hospitals?"**

1.2 LITERATURE REVIEW

Although the adoption of PHC strategy since the late 1970s was received as a way forward to ensuring equity and guaranteeing sustainability of delivered health services particularly to those in greatest need, several studies in other countries have identified various problems which threaten to wipe out the remarkable achievements which were made during the first decade after PHC implementation. For the purpose of this study, we will address ourselves to managerial, financial and constraints related to health services utilization that proceed from implementing the policy of cost sharing in public hospitals in particular.

1.2.1 Management constraints associated with cost sharing implementation

Effectiveness of exemptions and revenue use to benefit the poor relies heavily on good administrative practice, but in reality administrative failure is common[30]. Poor management has led to:

- lack of guidance on how to determine who is eligible for exemptions, deterring their consistent administration[31];
- failure to monitor and adjust exemption practice over time e.g. in Zimbabwe households earning cash incomes of less than Z$ 150 per month were exempted from paying fees in 1980 but inflation caused the number of people who qualified for exemption to fall sharply over the following decade, and by the end of the decade fewer than 5% of non-agricultural and domestic workers qualified[32];
- contradictory practice undermining the use of exemptions e.g. at St. Lucia, free care can be obtained at hospital level both with and without formal exemption[33];
- limited effectiveness in collecting fee revenue which undermines its use for service improvements, e.g. in Papua New Guinea the proportion of estimated revenue actually collected ranged from 14 to 88% between district hospitals[34];
- reversion of revenue to the central level, undermining both the incentives to collect it and its use for coverage and quality improvements[35];
- inappropriate use of revenue collected, e.g. in Ghana half the revenue collected accrues to the national Treasury and it is not clear how the revenue is used. The revenue sent to MOH was found to remain unused in non-interest bearing accounts, and although 25% is retained at point of use, "there was considerable reluctance at health centres and health posts to spend their percentage of the fees revenue"[36];
- uneven implementation of cost recovery policies between areas, with consequences for inter-area equity, e.g. not all district hospitals exempt the poor in Papua New Guinea[37];

- the potential or actual breakdown of policy implementation e.g. in the Dominican republic two contradictory laws are in force and so the policy's legality is dubious[38], whereas in Kenya, problems in implementation resulting from weak guidelines led to the suspension of outpatient fees[39].

A common response to these problems is an emphasis on the need to enhance management skills and capacities. But from experience with water programmes in Kenya, Yacob[40] argues that cost recovery requires a focus on capacity building in terms of the development of institutions, skills and abilities to sustain a community project and to manage fees competently. The World Bank on the other hand stresses the potential of decentralisation in addressing management problems[41;42].

However, health sector experience suggests that decentralisation is not a panacea for existing administrative weaknesses. Experience has shown in Zimbabwe, for instance, that decentralised screening procedures, in which revenue clerks decide whom to exempt, have been criticised in that the broader context of revenue collection and revenue-use decisions is very centralised. Thus the clerk "exercises considerable power but not accountability"[43].

Basic skills and motivational problems must also be addressed before initiating decentralised screening if it is to be effective. Common weaknesses include poor planning, weak financial management, and infrequent and ineffective supervision[44-46]. Community financing experience illustrates these problems. Although community groups have been involved in fee-related decision making and financial management, they have suffered both from too little support in terms of training, supervision, materials and supplies, undermining community motivation, whereas too much support "threatens to stifle community initiative"[47].

Experience has also shown that decentralisation is itself fraught with problems. It may generate inequities by undermining the power of the centre to re-distribute resources from more to less wealthy

areas[48]. Yet central resource re-allocation is likely to be particularly important where fee systems are introduced which allow revenue to be retained at the local level, and so exacerbate differences in resource availability between areas. Failure to achieve a balance of power between central and local levels may, therefore, undermine effective management within decentralised systems[49].

Other problems which can arise include: lack of political support; inadequate resource availability at national and local levels; insufficient administrative capacity to design and implement decentralised management; cultural traditions which favour hierarchical decision making; and limited participation in decision making outside the health sector[50-52].

An underlying problem though is that decentralisation requires a redistribution of power and control of finances away from the vested interests placed at the central level, and so may be blocked by central level bureaucrats as has been the case in Tanzania[53] and in Papua New Guinea[54].

In this context it is indicated that the institutional and management context of a country and its health sector should be considered in policy development so as to ensure that administrative procedures do not become a source of targeting error[55].

1.2.2 Financial Constraints Associated with Cost Sharing Implementation

Revenue use benefiting the poor will only be possible within cost recovery policies if the revenue raised through user charges is sufficient to remedy the existing quality and coverage weaknesses of the health system. However, data from national cost recovery schemes from 21 different countries[56] suggest that a recovery rate of about 5% of total government health sector recurrent expenditure, gross of administrative costs, is a reasonable expectation.

Cost recovery rates are constrained by low fee levels necessary in a context of low household income and limited risk-sharing capacity or mechanisms. They will also be undermined by the additional costs of exempting especially the revenue lost by reducing the pool of those required to pay[57]. In Ghana experience, the cost of the free care dispensed at primary district hospitals to health staff and their families (one eligible group) was estimated to represent 0-35% of the revenue collected at each facility the mean being 13%[58]. These costs will be particularly high in less wealthy areas where a greater proportion of the population will require exemption. Able to generate even less revenue than elsewhere, these areas will require additional resource allocations from the centre to protect the quality of available services[59].

The World Bank[60] has suggested that the needs of the poor go beyond strengthening existing services and require the provision of a minimum package of public health and "clinical interventions" at primary and secondary facilities. These interventions have been selected because they are highly cost-effective, and have the potential to generate the greatest savings in terms of "disability adjusted life years". The package is estimated to cost US$ 12 per head in a low income country. Political obstacles, however, seem likely to undermine the resource reallocations proposed as an alternative source of funds for this minimum package.

1.2.3 Available Options for Sources of Finance

As summarised in Appendix F, different options of generating the required revenue for funding health care services have been tried out[61]. In Sub-Saharan Africa[62], user fees are emphasised because out-of-pocket expenditures for health account for nearly one half of total expenditures. In the past, user fees have been viewed simply as a way of raising money for governments, without improving health systems in the process. Such an approach, however, could lead to the exclusion of the poor from access to health care. Hence the need to rethink user fees policies in view of having them designed to improve both quality and equity in the delivery of health care.

Self-financing health insurance is also emphasised in that this type of insurance enables many people to pool their resources to provide coverage for catastrophic illness or injury. In the past, positive aspects of this option in Sub-Saharan Africa have been overlooked and underestimated. Nevertheless the potential for self-financing insurance programmes is critical because they offer an alternative to tax-based publicly funded health care systems and because they can foster private sector development and can help free up governments funds that are currently allocated disproportionately to hospitals. In the process, this option can facilitate greater funds for public goods and services, as well as through subsidies targeted to the poor.

Broadly though, WHO[63] identifies four principal sources of finance for the health sector:

- **government financing** which includes health expenditure at all levels of government, together with the expenditure of public corporations. Hence certain services, especially those with public-good characteristics e.g. provision of safe water and sanitation and some preventive measures for infectious and parasitic diseases should be seen as core responsibilities of government and be government-financed;

- **private financing** for health care can either be direct or indirect. Direct payment includes: personal payments made directly to a wide range of providers including private practitioners, traditional healers and private pharmacists. In this context, user fees, whether for government-provided or for privately-provided health services, are an out-of-pocket payment and are therefore considered as health finance from a private source. Similarly, charges, contributions or prepayments by members of community financing schemes are also considered as coming from private (non-government) sources. Indirect payment comprises payments for health care services by employers e.g. payment by large and privately owned industrial complexes in developing countries or sharing of health care costs by employers in industrialised countries and health financing by NGOs e.g. local charity fund-raising for health care;

- **health insurance** is a mixed source of finance as it often draws contributions from both employers and employees and sometimes from government. Contributions to such schemes are often mandatory. They comprise: government or social insurance which provide compulsory or, to a lesser extent, voluntary coverage for people employed in the formal sector. Premiums or contributions are generally based on the individual's income, regardless of actuarial risk.

  Private insurance forms the second type of insurance. This type of insurance provides coverage for groups or individuals through third-party payer institutions operating in the private sector. This option is generally not income-related and varies with age and sex.

  Employer-based insurance is the third type. This insurance refers to coverage falling between the other two types, in which employers or parastatal or private bodies serve as the third-party payer or collection agent. Eligibility in this insurance is based on employment status. Hence those schemes are often required by national labour codes;

- **external sources** have also become important as financing agents especially in certain developing countries where governments have been unable to meet their health needs and commitments from internal sources. These comprise multilateral and bilateral aid donors and, to a lesser extent, NGOs.

Experience with **user fees** suggest that they lead to greater use of health services where there is: increased availability of essential supplies at the health facility level; greater accountability of the provider to the population; higher perceived quality; a phased-in rather than sudden increase in fees; local management of resources; and competitiveness with services with other providers[64]. Hence before any policy change, governments should not only assess the likely revenue potential of fee changes, but also carefully review the possible negative effects e.g. that different strategies will be

appropriate for different types of service; that there is a difference between nominal charges designed to deter unnecessary use of services and more substantial user fees designed to recover the cost of the service; and that policies on charges for public services should take into account the opportunities the user may have of opting for the private sector instead[65].

1.2.4 Determinants of Health Care Services Utilisation

The effect of cost sharing on utilisation of health care services have been considered by several studies. Although their study findings seem contradictory, they permit sharper insights into determinants of health care services utilisation patterns. According to Shaw and Griffin[66] the studies may be classified as follows: studies making use of time-series data on health facility utilisation rates before and after introduction of user fees; studies using multivariate statistical analysis of cross-sectional household data to separate out the effects of price and distance on utilisation and also to control selected personal characteristics of users; studies using multivariate statistical analysis of cross-sectional household data and facility characteristics as a determinant of utilisation; and studies which involve real-world experience as well as the scientific imperative of a control group. So far multivariate analysis reveals that many factors aside from price, including distance to district hospitals, personal characteristics, and the quality of care, play an important role in deciding which type of health care services to use.

1.2.5 Limitations of Previous Studies

Although a preliminary survey of the literature indicated that a number of studies have dealt with the effects of cost sharing on management, financing, available options for sources of finance and determinants of utilisation of health services, no study had been able to provide an answer to the question:

"Has the introduction of cost sharing in public district hospitals in Tanzania affected the management, financing and delivery of primary health care services in these district hospitals?"

Besides that, most of these studies had varied in terms of purposes, research methods, complexity of variables explored, study focus as well as models adopted in data analysis and interpretation of results. It was in the light of this background that the present study intended to achieve in the context of Tanzania objectives outlined below:

1.3 Research Hypothesis

In the light of related literature reviewed, the following were the hypotheses for this study:

- There would be no significant difference between the management of outpatient services in public district hospitals in Tanzania before and after the introduction of cost sharing.
- There would be no significant difference between the financing position of outpatient services in public district hospitals in Tanzania before and after introduction of cost sharing.
- There would be no significant difference between the delivery of outpatient services in public district hospitals in Tanzaniabefore and after the introduction of cost sharing.

1.4 Justification of the Study

This study was justifiable on the grounds that:

- It was timely in that, despite the economic hardships that Tanzania is going through, a number of donor agencies had recently threatened to withdraw their development aids to the country [67,68]. Hence an immediate need to look for dependable ways which could ensure sustainable funding and delivery of PHC services in future.

- It was a response to one of the further research needs which were recommended by a Report of a WHO Study Group[69].
- It was also hoped that the study would provide relevant data which would in turn be used by decision makers in PHC services delivery process at all levels in course of implementing the ongoing Health Sector Reform.
- Lastly, it was the conviction of the researchers that this study would stimulate other researchers to explore further the problem from different angles for an improved PHC strategy in this country.

1.5 Research Objectives

1.5.1 General Objective

Broadly the study set out to explore the relationship between the introduction of cost sharing and the management, financing and delivery of outpatient services in public district hospitals in Tanzania.

1.5.2 Specific Objectives

Specifically though the study set out:

- To determine the relationship between the introduction of cost sharing in public district hospitals and their management of outpatient services.
- To determine the relationship between the introduction of cost sharing in public district hospitals and the financing of outpatient services in these hospitals.
- To determine the relationship between the introduction of cost sharing in public district hospitals and their delivery of outpatient services.

- To investigate other factors which might be affecting the management, financing and delivery of outpatient services in these public district hospitals.
- To identify measures which can best address the problems of effective management, financing and delivery of outpatient services in these public district hospitals in terms of equity and sustainability.

1.6 Definition of Terms

For the purpose of this study, the following terms need clarification on how they were used.

1.6.1 Accessibility

This term was used to refer to possibilities of any outpatient to use essential sought care including those who might be unable to pay in that people cannot access the sought care because of a variety of factors including an individual's poverty; his/her geographical location, age or sex; and unavailability of services.

1.6.2 Affordability

This term was used to denote the level at which the outpatient was able to part with the charged fee in order to obtain an essential sought care at a given visit made for basic curative service without serious loss.

1.6.3 Cost Sharing

In Tanzania context, this term was used to refer to a system of paying for care where the patient is required to pay a proportion of the actual cost of the delivered care while the remaining proportion is met by a third party e.g. the government through tax-revenues.

This system began to be implemented in public hospitals in July 1993. Its implementation was done in phases by level and type of services delivered as revealed in Appendix G. Phase 1 which comprised public referral, regional and district hospitals which had Grade I and II facilities began on the 1st of July 1993. During this phase, user fees for Grade I and II services were increased. Phase 2 began on the 1st of January, 1994 comprising public referral and regional hospitals. During this phase Grade III services were charged user fees. Phase 3 which began on the 1st of July, 1994 comprised public district hospitals. It was during this phase that user fees for Grade III outpatient services were introduced. The last phase which is not yet implemented will involve introduction of user fees in public health centres and dispensaries [70]. This system broadly aims:

(a) To generate additional revenues for covering costs of providing care services.
(b) To improve the quality of delivered care services in public hospitals.

1.6.4 Delivery of Outpatient Services

The term was basically used to denote delivery of basic curative and selected preventive services to outpatients between 1992 and 1995.

1.6.5 Equity

In the context of health care delivery, this notion was used to denote that all outpatients (able and unable to pay) gain equal access to sought care.

1.6.6. Financing of Outpatient Services

This notion, on the other hand, was used to refer to the trend of funding of outpatient services in public district hospitals between 1991/92 and 1994/95 financial years.

1.6.7 Health Professionals

These were selected professionals who for the purpose of this study could answer questions on the management of cost sharing implementation and delivery of outpatient services, the funding of outpatient services, medical records, and MCH services. In this context, from each public district hospital visited, professionals interviewed included: the DMO or his representative; the Hospital Health Secretary or a Health Administrator; the Hospital Accountant; the Medical Records Officer; and the MCH - Coordinator or her representive.

1.6.8 Management of Outpatient Services

Basically this term was used to refer to the management of cost sharing implementation process in course of delivering basic curative and the selected preventive services to outpatients in public district hospitals.

1.6.9 Outpatient Services

These were basic curative and the following selected preventive services (Health Education, Underfives Growth Rate Monitoring, and Antenatal Care).

1.6.10 Primary Health Care Services (PHC)

According to the WHO [71] PHC is essential health care made accessible at a cost the country and community can afford with methods that are practical, scientifically sound and socially acceptable. Every one in the community must have access to it, and everyone should be involved in it. In addition to the health sector, related sectors should also be involved.

At the very least, PHC should include education of the community on the health problems prevalent and on methods of preventing health problems from arising or of controlling them; the promotion of adequate supplies of food and of proper nutrition; sufficient safe water and basic sanitation; maternal and child health care including family planning; the prevention and control of locally endemic diseases, immunization against the main infectious diseases; appropriate treatment of common diseases and injuries; and the provision of essential drugs.

PHC is the central function and the main focus of a country's health system, the principal vehicle for the delivery of health care system stretching from the periphery to the centre, and an integral part of the social and economic development of a country.

In Tanzania context, PHC Implementation Guidelines were formulated in 1983[72]. A PHC Steering Committee was thereafter formed to oversee their implementation. PHC

committees at national, regioal, district and village levels were also formulated in order to facilitate decision making, implementation and monitoring of PHC activities. In 1992, these guidelines were reviewed and in their stead the PHC Strategy was formulated in order to motivate and sensitise communities towards multisectoral approaches to health care. However since from January 1996 the MOH has charged the PHC Secretariat with the responsibility of coordinating the implementation of the ongoing Health Sector Reform, the Secretariat is likely to be reorganised in the near future. The reorganisation will be in terms of its organisation, structure, functions, roles and responsibilites.

Nevertheless for the puprose of the present study, PHC has been particularly used to refer to outpatient services delivered in public district hospitals in Morogoro and Tanga regions between 1992 and 1995.

1.6.11 The period After the Introduction of Cost Sharing in Public District Hospitals

This is the period between 1993/94 and 1994/95.

1.6.12 The Period Before the Introduction of Cost Sharing in Public District Hospitals

This is the period between 1991/92 and 1992/93.

1.7 Limitation of the Study

Due to limited funds which were available for the study and the time factor only 10% of the 20 regions in Tanzania Mainland were involved in the study. Also because the data collection was done during harvest season, the turn up of household heads was poor especially in Morogoro. Since no hospital was able to provide information on contributions made by each source of funds

for the two periods (1991/92-1992/93 and 1993/94 - 1994/95) the study could not determine in measurable terms the relationship between the financing position of outpatient services in public district hospitals before and after the introduction of cost sharing.

2. The Study Methodology

2.1 The Methods

2.1.1 For the study to determine the relationship between the management of outpatient services in public district hospitals in Tanzania before and after the introduction of cost sharing, hospital performance data was collected on cost sharing implementation management and outpatient services management during health facility survey.

From each public hospital, the Hospital Health Services Secretary or a Health Administrator was consulted to answer questions primarily set on cost sharing implementation management. The questions raised in this regard sought for information on:

a) Whether there were prior preparations before introducing cost sharing in public district hospitals;

b) Who decided on the currently used user fees structure;

c) Whether user fees in public district hospitals were fixed or not;

d) Who has the right to revise these rates, if they were fixed;

e) Which outpatient services are delivered;

f) Which services among these outpatient services were charged for and how much was the charge per services;

g) Whether outpatient services were allocated any share from revenues generated through user fees;

h) Which other sources of funds were used to finance these services, if they were not allocated any share;

i) Whether the hospital had an instance when an outpatient was unable to pay for the sought care;

j) Which corrective measure(s) were taken where the hospital experienced such an instance;

k) Whether the granted exemption affects the type of care sought by the outpatient exempted from paying the user fees he/she was owed;

l) Which changes should be made in order to improve the existing exemption mechanism;

m) How the quality of outpatient services was compared in 1996 and before 1994 given the then cost sharing implementation management trend;

n) Which indicators were used to measure the noted improvement in case the quality was viewed to have had improved;

o) Which were the contributing factors if the quality was either viewed to have had remained constant or to have had decreased;

p) Which measures should be taken to solve each factor.

For questions focusing on outpatient services management, the DMO or his representative was consulted at each public hospital in order to seek for data on:

a) Number of staff by category;

b) The annual staffing position before and after 1994;

c) Whether staff were satisfied with their work schedule;

d) Which were the contributing factors, if they were not satisfied;

e) Which corrective measure(s) should be taken per each factor in order to improve the situation;

f) The physical facilities position before and after 1994 by type;

g) Whether outpatients bought prescribed drugs from within the respective hospital;

h) Where do they purchase prescribed drugs if they were not bought from within;

i) How the management of outpatient services was compared before and after 1994;

j) Which indicator(s) were used to measure improvement in case the management of outpatient services was perceived to have had improved;

k) Which were the contributing factors if the management of outpatient services was either perceived to have had remained constant or to have had decreased;

l) Which measure(s) should be taken to solve each factor.

2.1.2 For the study to determine the relationship between the financing position of outpatient services in public district hospitals before and after the introduction of cost sharing, hospital performance information was collected from the Hospital Accountant during health facility survey on:

a) Sources of finance used to fund outpatient services;

b) The share contributed by each source between 1991/92 and 1994/95;

c) How the financing position of outpatient services was compared before and after the introduction of cost sharing;

d) Which indicator(s) were used to measure noted improvement in case the financing position of outpatient services was perceived to have had improved;

e) Which were the contributing factors if the financing position of outpatient services was either viewed to have had remained constant or to have had decreased;

f) Which measures should be taken to solve each factor.

2.1.3 For the study to determine the relationship between the delivery of outpatient services in public district hospitals before and after the introduction of cost sharing hospital performance data was collected during health facility survey on: the annual total number of outpatients made visits at each hospital for basic curative services; homes delivered

with health education, underfives whose growth rates was monitored using growth chart; and pregnant women received antenatal care during pregnancy. These latter outpatient services are preventive. From each public hospital, the Hospital Medical Records Officer was consulted for the annual total number of outpatients made visits for basic curative services between 1992 and 1995. Whereas for the annual total number of: homes delivered with health education, underfives whose growth rate was monitored using growth chart and pregnant women received antenatal care during pregnancy was obtained from the MCH Co-ordinator.

Five questions which were set for the Hospital Medical Records Officer sought for information on:

a) The annual outpatients attendance by sex between 1992 and 1995;
b) How was the delivery of curative services compared before and after 1994;
c) Which indicator(s) were used to measure the noted improvement in case the delivery of curative services was viewed to have had improved;
d) Which were the contributing factors if the delivery of curative services was either viewed to have had remained constant or to have had decreased;
e) Which measures should be taken to solve each factor.

For the MCH Co-ordinator, on the other hand, seven questions were set in order to obtain data on:

a) The annual number of homes delivered with health education between 1992 and 1995;
b) The annual number of underfives whose growth rate was monitored using growth chart between 1992 and 1995;
c) The annual number of pregnant women received antenatal care during pregnancy between 1992 and 1995;

d) How was the delivery of these preventive services compared before and after 1994;

e) Which indicator(s) were used to measure the noted improvement in case the delivery of these services was perceived to have had improved;

f) Which were the contributing factors if the delivery of these preventive services was either viewed to have had remained constant or to have had decreased;

g) Which measures should be taken to solve each factor.

2.1.4 For the study to investigate extra factors which might be affecting the management, financing and delivery of outpatient services in public district hospitals, the data was collected on other contributing factors from outpatients and household heads, during outpatient and household surveys.

2.1.5 For the study to identify appropriate measures which can best address the problems of effective management, financing and delivery of outpatient services in public district hospitals in terms of equity and sustainability, opinions were sought from the health professionals, outpatients and household heads on which corrective measure(s) should be taken to solve each contributory factor mentioned during health facility, outpatient and household surveys.

2.1.6 Lastly, for the study to verify some of the hospital performance data on: cost sharing implementation management; outpatient services management; and delivery of both basic curative services and preventive services, outpatients and household heads were consulted during outpatient and household surveys.

2.2 Research Tools

2.2.1 For the study to collect information on cost sharing implementation management and outpatient services management parts II and III of the Health Facility Questionnaire, were

used. Each of the two parts contained open and closed- ended questions (see Appendix H). However, it should be noted that this information was collected for two periods (two years before the introduction of cost sharing in public district hospitals that is 1992-1993 and two years after the introduction of cost sharing in these hospitals that is 1994-1995).

2.2.2 For the study to collect data on the trend of financing position of outpatient services for the two periods part IV of the Health Facility Questionnaire was used (see Appendix H).

2.2.3 For the study to obtain data on the trend of the delivery of outpatient services (basic curative and preventive) for the two periods, part V of the Health Facility Questionnaire was used (See appendix H).

2.2.4 For the study to collect information on extra factors which might be affecting the management, financing and delivery of outpatient services in public district hospitals and appropriate measures which can best address the problems of effective management, financing and delivery of outpatient services in these hospitals in terms of equity and sustainability, a set of three questionnaires was used. They included the Health Facility Questionnaire, the Outpatient Questionnaire (see Appendix I), and the Household Head Questionnaire (see Appendix J). In order to ensure standardization, both the outpatient and the household head questionnaires were translated into Kiswahili the national language in Tanzania.

2.2.5 For the study to supplement the data obtained using other tools:

a) It reviewed published and unpublished documents.

2.3 The Sampling

For the study population sample to be representative two objective sampling techniques were used.

2.3.1 The stratified random sampling was used to select:

a) Four public district hospitals consulted and four control hospitals.

From each region the list of all hospitals by ownership was obtained from the respective Regional Medical Officer. As shown in Appendix K, from each region the first public district hospital was the one which collected the highest amount through cost sharing in 1994. Whereas the second public district hospital was the one which collected the lowest amount through cost sharing in 1994. One private or voluntary hospital in the proximity of each of the two selected public district hospitals was also randomly included in the study as a control hospital. Hence a total of 8 hospitals. This sample was representative mainly on two grounds. The two regions have an average number of public district hospitals exclusive of district designated hospitals. Ecologically, the two regions have an ecology which covers all zones in Tanzania.

b) The following health professionals from each hospital consulted: DMO or his representative; MCH Co-ordinator or her representative; Hospital Health Services Secretary or a Health Administrator; Hospital Accountant; and the Hospital Medical Records Officer. These professionals were interviewed during health facility survey in order to collect data on: cost sharing implementation management; outpatient services financing; basic curative services delivery; and preventive services delivery. Hence a total of 40 health professionals were interviewed in 8 hospitals. It must be noted that given the focus of this study only five health professionals were consulted from each hospital visited owing to the role each professional was playing in cost sharing implementation . As such, this sample was representative.

c) The nearest village to each hospital consulted for household survey.

2.3.2 The systematic sampling method, on the other hand, was used to select:

a) 30 outpatients (15 being male patients aged 18+ years old and the remaining 15 being female patients aged 18+ years old) from each hospital consulted for exit interviews. For each sex, every third patient was interviewed until the required number was attained. This age group was chosen on the following grounds: in Tanzania, adulthood is legally marked by this age; and adults can decide where to seek for care and in most cases they pay for it themselves. Hence a total of 240 outpatients were interviewed in 8 hospitals.

This sample was representative in that in the light of the annual outpatients attendance during 1995:

a) 30 outpatients was 100.17% of the daily outpatients attendance of 29.95 during 1995 for Kilosa public district hospital;

b) 30 outpatients was assumed to be the average daily outpatients attendance for Usagara Private dispensary which was opened in early 1996;

c) 30 outpatients was 24.87% of the daily outpatients attendance of 120.64 during 1995 for Ulanga public district hospital;

d) 30 outpatients was 135.69% of the daily outpatients attendance of 22.11 during 1995 for Kwiro Mission dispensary;

e) 30 outpatients was 35.5% of the daily outpatients attendance of 84.37 during 1995 for Handeni public district hospital;

f) 30 outpatients was 14.97% of the daily outpatients attendance of 200.43 during 1995 for St. Francis Mission hospital Kwamkono;

g) 30 outpatients was 737.10% of the daily outpatients attendance of 4.07 during 1995 for Korogwe public district hospital; and

h) 30 outpatients was 20.91% of the daily outpatients attendance of 143.45 during 1995 for St. Raphael's Mission hospital.

b) 30 household heads from each nearest village to the hospital consulted. However since the nearest village to Kilosa district hospital was also the nearest village to the private dispensary visited and since in Ulanga district, household heads in this district from the nearest village to the public district hospital could not turn up for the interview, a total of 180 household heads were interviewed during household surveys. Every third household head was included in the study until the required number was reached per village. This sample was also representative in that this study has used the upper bound of 30 household heads per village while several surveys in Tanzania including agricultural, income and expenditure, demographic, health and social surveys use between 15 and 30 households per village.

2.4 Data Collection and Analysis

2.4.1 Data Collection

A cross-sectional study was conducted in Morogoro and Tanga regions between 5th June and 12th July, 1996. There were three determining factors for selection of this study area. Given the time and seasonal factors the two regions would be more accessible to the study team. The district level, on the other hand, was given much focus by this study in that. "It is at this level of the health services that the national policy on PHC is put into practice" [73]. Lastly, in Tanzania context, the study would not go beyond this level because the introduction of cost sharing policy, which was introduced in three phases in the public health sector since 1993/1994 financial year, was not yet introduced beyond district and district designated hospitals [74].

2.4.1.1 In order to validate the research tools which were used in data collection drafts were pre-tested at Morogoro Regional Hospital in Morogoro so as to spot in

advance causes of difficulties which might arise during data collection. This hospital was preferred because it serves as both a district and a regional hospital.

2.4.1.2 The three sets of questionnaire were administered by researchers in collaboration with two research assistants during health facility, outpatient and household surveys.

2.4.2 Data Analysis

For the purpose of this study, the following were the essentials to understanding empirical results obtained. Utilisation of outpatient services (basic curative and preventive) was the dependent variable which in this study was referred to as the annual total number of: outpatients made visits at each hospital consulted for basic curative services; homes delivered with health education, underfives whose growth rate was monitred using growth chart; and pregnant women received antenatal care during pregnancy. Hence the level of utilisation per hospital (public and private) before and after the introduction of cost sharing in public district hospitals was determined by analysing hospital performance data. Explanatory variables, on one hand, comprised affordability, quality, access, and equity variables. Whereas, on the other hand, they consisted individual and household characteristics. These were determined by analysing outpatients and household heads data.

Data entry in computer was done using the SPSS statistical package using a fixed field format. Questionnaires from different hospitals were summarised and given serial numbers. All questions were coded prior to data entry in the computer. Data from each survey was entered separately. In order to validate data entry, checking for consistency and for unwanted entries was done. Frequency print out for

different questions was also done. If there was any missing information or unwanted entries, a search for questionnaire(s) using serial number(s) was done and the information was verified by cross checking the actual questionnaire(s). The data obtained was subsequently analysed using the SPSS package and descriptive statistical analysis. For data obtained using open-ended questions, summary sheets were used to analyse it manually. In order to accept or reject the research hypothesis, a paired t-test was performed on selected aspects of outpatient services management and delivery using the SPSS package.

3. The Study Results

3.1 The Relationship Between the Management of Outpatient Services in Public District Hospitals Before and After the Introduction of Cost Sharing

3.1.1 Cost Sharing Implementation Management

100% of 4 health professionals interviewed in public hospitals on whether there were prior preparations before introducing cost sharing in public district hospitals confirm there were preparations in advance. With the question on who decided on the currently used user fees structure, again 100% of 4 health professionals interviewed in public hospitals in this regard confirmed it was the MOH.

The question as whether user fees in public district hospitals are fixed or not, 100% of 4 health professionals interviewed in public hospitals confirmed user fees per service charged for have been fixed since the introduction of cost sharing in 1994. Whereas 66.7% of 3 health professionals responded to this question in private hospitals show that user fees in private hospitals fluctuate.

In order to establish who has the right in public district hospitals to revise these rates, findings reveal that it is the MOH which has the right. This was confirmed by 75% of 4 health professionals interviewed in this regard. On the contrary the findings reveal that the charging system in private hospitals is flexible enough to allow respective hospitals to revise used rates in order to meet their local needs. This finding is confirmed by 100% of 4 health professionals interviewed in private hospitals.

In both types of hospitals findings reveal there are basically two types of outpatient services. Basic curative and preventive services. However, not all basic curative services are charged for by both types of hospitals. Hence as shown in Table 1 below, while both types of hospitals charge for medication, medical examination on special request, consultation, and laboratory investigation, yet their user fees differ.

Table 1: Services Charges in US $ by Type of Hospital

Services	Public Charges	Private Charges
Medication fee	0.09	0.17-0.34
Student medical examination fee	0.86	-
Civil servant medical examination fee	2.59	-
Medical examination fee on special request	2.59	0.17
Medical examination fee on compensation	5.17	-
Medical examination fee for Medical Board consideration	17.24	-
Grade I and II consultation fee	0.34	0.34
Grade III consultation fee	0.17- 0.25	0.34
Laboratory investigation fee	0.17	0.17-1.72
Optical examination fee	2.59	-

Source: Data obtained using the Health Facility Questionnaire

Note: Exchange rate used was 580TShs. per US $

With preventive services, the findings reveal that while in public hospitals their delivery is entirely free of charge to pregnant women and children under five years old, in private hospitals some of preventive services are charged for lower rates depending on the age and the level of the care. Children under five years old, for example, pay fee ranging from 50% to 75% of the adult fees in order to recover some care expenses.

With regard to whether outpatient services are allocated any share from revenues generated through user fees, the results show that in practice there is no demarcation between basic curative and preventive services. The line items which have been benefiting from collected revenues in both types of hospitals include: staff salaries, essential supplies and equipment, renovation of hospital buildings and running costs. In order to finance outpatient services, findings reveal there are four main sources of funds used including: donations; user fees in public hospitals or hospital fees in private hospitals; warrants of funds from the central government and grants for hospitals with aided staff.

100% of 4 health professionals interviewed in private hospitals visited confirm they had experienced several cases where outpatients were unable to pay for the sought care. Whereas 50% of the 4 health professionals interviewed in public hospitals confirm they had only experienced a few instances. In response to outpatients who were unable to pay for the sought care, the results obtained from the same respondents in both types of hospitals reveal that such outpatients are normally exempted from paying the fee they are owed.

The exemption scheme, however, is practiced differently by the two types of hospitals. Findings show that while public hospitals automatically grant exemptions on two main grounds (type of disease and one's poverty level), in private hospitals one is granted exemption either upon provision of a dependable proof of inability to pay or on meeting agreed condition(s) e.g. one can be attended on credit.

The question on whether the granted exemption affects the type of care sought by the outpatient exempted from paying the user/hospital fee he/she was owed, the results reveal that in both types of hospitals once the exemption has been granted it does not affect at all the type of care delivered to the recipient.

For the existing exemption mechanism to be improved in public districts hospitals, 100% of 4 health professionals interviewed in public hospitals, suggest that instead of automatic exemptions, they should be granted on proven grounds. For example, the community from which the exemption applicant comes should be involved in proving one's inability to pay for the sought care. Also the results suggest that since chronic diseases are too expensive to treat, sufferers should contribute part of the total cost.

Given the current trend in cost sharing implementation management in public district hospitals, the findings obtained from 100% of 4 health professionals interviewed reveal that the quality of outpatient services in these hospitals has remained constant as before the introduction of cost sharing. Whereas 100% of 4 health professionals interviewed in private hospitals acknowledges there has been a very remarkable improvement in the quality of their services after the introduction of cost sharing in public district hospitals.

According to findings obtained from 75% of health professionals interviewed in public hospitals, the quality of outpatient services in these hospitals has remained constant as before the introduction of cost sharing due to the following factors:

a) Public hospitals have no right to revise fixed user fees by the MOH. As a result, the charging system in these hospitals is not only rigid, but also it does not reflect the buying prices per essential supply dispensed or the type of disease attended;
b) Few outpatient services are charged for;
c) There has been poor supervision over user fees collection and expenditure;

d) Meagre budget is still allocated to public district hospitals; and

e) Consequently, there has been inadequate supply of essential supplies e.g. drugs on a regular basis.

For these factors to be solved, the findings recommend the following measures:

a) Public district hospitals should run themselves so that they may have more autonomy in ensuring their charging system reflects both the buying price(s) per essential supply dispensed and the type of disease attended;

b) Number of outpatient services to be charged should be increased;

c) There must be strict supervision over user fees collection and expenditure;

d) Budget allocated to public district hospitals should be increased;

e) Ensure essential supplies are in place on a regular basis and they are properly controlled.

3.1.2 Outpatient Services Management

According to findings obtained after cross tabulating the responses on the number of staff by category and the annual staffing position before and after 1994 in public district hospitals, 66.7% of 3 health professionals responded in public hospitals reveal that the staffing level by category has been on decrease both before and after 1994 as shown in Table 2 below.

Table 2. Public district Hospital Staffing Level: Before and After 1994.

		After		
		On Increase	On Decrease	Constant
Before	On Increase	-	-	-
	On Decrease	-	66.7% (n=2)	33.3% (n=1)
	Constant	-	-	-

Source: Data obtained using the Health Facility Questionnaire

The question on whether staff were satisfied with their work schedule, the results reveal that staff are not satisfied due to failure to pay them call allowances, no payment in case one is injured during work, and poor staff salaries. For this situation to be improved, the findings recommend that staff salaries should be increased taking into consideration risks staff are exposed to during work.

As shown in Table 3 below, findings reveal that although physical facilities in public district hospitals were expected to be on increase as a result of the introduction of cost sharing, they did not. Instead for most facilities remained constant as before the introduction of cost sharing while the shortage for motor vehicles increased by 2.

Table 3: Difference in Shortages of Physical Facilities in Public District Hospitals: Before and After 1994

Type of Facility	Shortage Level
Beds	Remained Constant
MCH Vaccines	Remained Constant
Essential drugs	Remained Constant
Laboratories	Remained Constant
Blood banks	Remained Constant
X-ray sections	Remained Constant
Theatre	Remained Constant
Inpatient wards	Remained Constant
Kitchen	Remained Constant
Laundries	Remained Constant
Technical Carpentries	Remained Constant
Tailoring workshop	Remained Constant
Mortuaries	Remained Constant
Motorcycles	Remained Constant
Motor vehicles	Increased by 2

Source: Data obtained using the Health Facility Questionnaire

The question on whether outpatients buy prescribed drugs from within the respective hospital, 75% of 4 health professionals interviewed in public hospitals in this regard said yes they do. However, 25% of these respondents put clear that sometimes, when drugs are available in public pharmacies, they buy prescribed drugs from within the respective hospital whereas sometimes not. On the contrary, 100% of 4 health professionals interviewed in private hospitals confirm that outpatients buy prescribed drugs from within their hospitals. In an effort to verify findings obtained using the Health Facility questionnaire, responses of outpatients and household heads responded to this question were analyzed. Results obtained after the analysis reveal that 64% of 113 outpatients responded to this question in public hospitals they claims they normally do not get prescribed drugs from within these hospitals in that they are normally not available.

A similar remark was made by 60% of 133 household heads who answered this question. 25% of 4 health professionals interviewed in public hospitals mention private pharmacies as the main source of prescribed drugs. This finding is confirmed by 64% of 113 outpatients interviewed in public hospitals and 60% of 133 household heads interviewed. Two more sources are added in by 13.2% of 113 outpatients responded to this question in public hospitals. They include self-medication and traditional healers once the patient finds the fee is unaffordable in private pharmacies.

3.1.3 Accepting or Rejecting the Research Hypothesis

In regard to the management of outpatient services in public district hospitals before and after the introduction of cost sharing, the following was the hypothesis which was tested using a paired t-test using the SPSS package:

> **"There would be no significant difference between the management of outpatient services in public district hospitals in Tanzaniabefore and after introduction of cost sharing".**

As revealed in Table 4 below, the test which placed much emphasis on the staffing position and shortage of physical facilities, reveal that this hypothesis was accepted. The two variables were chosen in that they reflect the two periods of interest to this study.

Table 4: **Test Results for the Hypothesis Used to Determine Relationship Between Management of Outpatient Services in Public District Hospitals Before and After Introduction of Cost Sharing**

Variables	t-value	Degree of freedom	2-tailed Probability	Conclusion
Staffing Position	-1.00	2	0.423	Accept the Hypothesis
Shortage of Physical facilities	0.00	2	1.000	Accept the Hypothesis

Source: Data obtained using the Health Facility Questionnaire

3.2 The Relationship Between the Financing Position of Outpatient Services in Public District Hospitals Before and After the Introduction of Cost Sharing.

100% of 4 health professionals interviewed in public hospitals said the main sources of finance used to fund outpatient services include donations, user fees, and warrants of funds from the central government. Unfortunately since there was no hospital which was able to provide information on the share each source did contribute between 1991/92 and 1994/95, this variable was ignored in the analysis. Nevertheless, the comparison of the financing position of outpatient services before and after the introduction of cost sharing as shown in Table 5 below reveal there was a notable improvement.

Table 5: Financing Position of Outpatient Services by Type of Hospital: Before and After Introduction of Cost Sharing

Type of Hospital	Financing Position	
	Improved	Decreased
Public	66.6% (n=2)	33.3% (n=1)
Private	100% (n=3)	0%
Total	83.3% (n=5)	16.7% (n=1)

Source: Data obtained using Health Facility Questionnaire

With the indicators used to measure the noted improvement in the financing level of outpatient services, the results reveal that 25% of 4 health professionals interviewed in public district hospitals in this regard use the increased number of staff in these hospitals while 50% use the increased financing position in these hospitals. The remaining 25% use the increased attendance rate of outpatients.

3.3. The relationship Between the Delivery of Outpatient services in Public district Hospitals Before and After the Introduction of Cost Sharing.

3.3.1 The Delivery of Basic Curative Services.

As revealed in Table 6 below, the analysis of hospital routine performance data reveal that there has been a fall of outpatients attendance for basic curative services by 5% in public hospitals while in private hospitals there has been a slight increase by about 1% after the introduction of cost sharing in public hospitals.

Table 6: Outpatients Attendance for Basic Curative Services: Before and After Introduction of Cost Sharint by Year, Type of Hospital and Sex

Year	Type of Hospital	Male	Female	Total
1992/93	Public	109,363	54,124	163,487
	Private	?	?	275,914
1994/95	Public	69,412	85,485	154,897
	Private	?	?	278,543

Source: Data obtained using the Health Facility Questionnaire

Note: ? = Not all private hospitals were able to provide data by sex

Findings obtained from 100% of 4 health professionals interviewed on which might have been the contributing factors to the decreased level of delivery of basic curative services in public district hospitals reveal that poor supervision over user fees collection and expenditure has been the basic factor. For these findings to be verified, responses given by outpatients interviewed in public hospitals and those which were given by household heads were analyzed. The results obtained reveal that 70% of 103 outpatients and 81% of 119 household heads who answered this question associate the decreased level of delivery of basic curative services in public hospitals with:

a) Lack of essential supplies and equipment and their control especially drugs;

b) Too much bribery in that *'no money no care'*;

c) Unaffordable user fees; and

d) Bad attitude toward patients among some of services providers.

For this situation to be improved, the three groups suggest the following measures. Health professionals suggest there must be strict supervision over user fees collection and expenditure. Whereas both outpatients and household heads add in the following measures:

a) Dishonest staff should be fired immediately;

b) Staff salaries must be increased;

c) Essential supplies and equipment should be in place on a regular basis and properly controlled.

3.3.2 The Delivery of Preventive services.

As shown in Table 7 below, the results reveal that while the annual total number of outpatients delivered preventive services has been on decrease in private hospitals, it has been on increase in public hospitals. This finding is confirmed by 75% of 4 health professionals interviewed in public hospitals and 33.3.% of 3 health professionals responded to this question in private hospitals.

Table 7: Delivery of Preventive Services: Before and After Introduction of Cost Sharing by Type of Service, Hospital, and Year

Type of Preventive Services	Type of Hospital	1992/1993	1994/1995	Total
Homes Delivered with Health Education	Public	1,376	1,552	2,928
	Private	168	133	301
U5 Whose Growth Rate was Monitored Using Growth Chart	Public	352,547	603,863	956,410
	Private	38,741	41,341	80,082
Pregnant Women Received Antenatal Care During Pregnancy	Public	174,709	232,113	406,822
	Private	21,041	19,829	40,870

Source: Data obtained using the Health Facility Questionnaire

Note: U5 = children under five years old

According to findings obtained from the above respondents (75% of 4 health professionals interviewed in public hospitals) the main indicator used to measure the noted improvement in delivery of preventive services even after the introduction of cost sharing is the increased attendance of homes delivered with health education, underfives and pregnant women.

3.3.3 Accepting or Rejecting the Research Hypothesis

The hypothesis which was put forward in regard to outpatient services delivery in public district hospitals before and after the introduction of cost sharing was:

"There would be no significant difference between the delivery of outpatient services in public district hospitals in Tanzania before and after introduction of cost sharing".

In this context, a paired t-test was used to test this hypothesis using the SPSS package where the variables involved in the test included: outpatients attendance for basic curative services; homes delivered with health education; underfives whose growth rate was monitored using growth chart; and pregnant women who received antenatal care during pregnancy for the two periods. As revealed in Table 8 below, the above stated hypothesis was also accepted.

Table 8: Test Results for the Hypothesis Used to Determine Relationship Between Delivery of Outpatient Services in Public District Hospitals Before and After Introduction of Cost Sharing

Variable	t-value	Degree of Freedom	2-tailed Probatility	Conclusion
Outpatients Attendance for Basic Curative Services	1.00	4	0.372	Accept the Hypothesis
Homes Delivered with Health Education	-0.83	4	0.453	Accept the Hypothesis
Underfives Whose Growth Rate was Monitored Using Growth Chart	-1.68	6	0.144	Accept the Hypothesis
Pregnant Women Who Received Antenatal Care During Pregnancy	-1.03	6	0.343	Accept the Hypothesis

Source: Data obtained using the Health Facility Questionnaire

3.4 Other Factors Affecting Outpatient Services Management, Financing and Delivery in Public District Hospitals

For the study to identify other factors that might be affecting the management, financing and delivery of outpatients services, data was collected from outpatients and household heads on:

affordability of delivered services, the quality of delivered services, accessibility to delivered services, and the equity of delivered services.

3.4.1 Factors Proceeding from Affordability of Delivered Outpatient Services

Results obtained seem to confirm that affordability is not a contributing factor in that 89% of 93 outpatients responded to this question in public hospitals regard charged user fees affordable whereas 63% of 147 household heads responded to this question had a similar observation. This finding was justified further by the commonly used method in raising the required funds for the sought care by both groups. 60.5% of 93 outpatients responded to this question in public hospitals and 52% of 147 household heads regard out- of- pocket money as their major source. The rest use other sources including sale of one's crops, borrowing money and payment being made by the third party e.g. one's spouse or employer.

3.4.2 Factors Proceeding from the Quality of Delivered Outpatient Services

As it has been discussed earlier, 70% of 103 outpatients and 81% of 119 household heads who answered this question confirm there has be no any notable improvement in the quality of delivered outpatient services in public hospitals because of:

a) Lack of essential supplies and equipment and their control especially drugs;
b) Too much bribery in that *'no money no care';*
c) Unaffordable user fees; and
d) Bad attitude towards patients among some of services providers.

3.4.3 Factors Proceeding from Accessibility to Delivered Services

Results obtained also seem to rule out the question of accessibility to delivered outpatient services as a contributing factor because 90% of 113 outpatients responded to this question in public hospitals live between 0.5 and 2 kms from the hospital they prefer to seek care from. This finding was confirmed further by 81% of 147 household heads responded to this question in that they live between 0.5 and 3 kms from the hospital they usually go to for the sought care.

3.4.4 Factors Proceeding from Equity of Delivered Services

Too much bribery seems to threaten equity of delivered services in that one is delivered service on production of money short of that no care. 70% of 103 outpatients responded to this question in public hospitals confirm this finding whereas 81% of 119 household heads responded to this question had a similar remark.

4. Discussion and Conclusions

This study was guided by three hypothesis which were used to determine:

a) The relationship between the management of outpatient services in public district hospitals in Tanzania before and after the introduction of cost sharing;

b) The relationship between the financing position of outpatient services in public district hospitals in Tanzania before and after the introduction and cost sharing.

c) The relationship between the delivery of outpatient services in public hospitals in Tanzania before and after the introduction of cost sharing in view of investigating other factors which might be affecting outpatient services management, financing and delivery in public district hospitals and identify appropriate measures which can best address the problems of effective management, financing and delivery of outpatient services in public district hospitals in terms of equity and sustainability.

For the empirical results obtained to be understood, the following were the essentials. Utilization of outpatient services (basic curative and preventive) was the dependent variable which was basically referred to as the annual total number of: outpatients made visits at each hospital consulted for basic curative services; homes delivered with health education; underfives whose growth rate was monitored using growth chart; and pregnant women received antenatal care during pregnancy. As such, the level of Utilization per hospital (public and private) before and after the introduction of cost sharing in public district hospitals was determined by analyzing hospital performance data collected using the health facility questionnaire.

The data obtained was analyzed using the SPSS package and descriptive statistical analysis. Summary sheets were used to analyze manually data obtained using open-ended questions. In order to accept or reject the research hypothesis a paired t-test was performed on selected aspects of outpatient services management and delivery before and after the introduction of cost sharing in public district hospitals using the SPSS package. However a word of caution must be given before getting into the details of discussion. Since there was no hospital which was able to provide information on contributions made by each source of funds for the two periods (1991/92 - 1992/93 and 1993/94 - 1994/95), the study could not determine in measurable terms the relationship between the financing position of outpatient services in public district hospitals before and after the introduction of cost sharing.

4.1 Discussion

4.1.1 The Relationship Between the Management of Outpatient Services in Public District Hospitals Before and After the Introduction of Cost Sharing

Test results for the first hypothesis which was used to determine the relationship between management of outpatient services in public district hospitals before and after the introduction of

cost sharing reveal there was no significant difference as shown in Table 4 above. Although results obtained reveal there were prior preparations before cost sharing was introduced in public district hospitals, a number of factors seem to be associated with the noted inadequate improvement in the management of outpatient services in these hospitals.

While in private hospitals their hospital fees fluctuate in order to reflect the buying price(s) of dispensed supplies and the type of disease attended, in public hospitals user fees per service charged for have been fixed since the introduction of cost sharing in 1994. Ever since one course of drugs regardless of the type of disease attended in public hospitals costs US $ 0.09. For the study to establish why public hospitals has such a rigid charging system it was discovered that the MOH is the sole body which has the right to revise the user fees structure. This charging system, however, threatens both the quality and sustainability of outpatient services management, financing and delivery in these hospitals in that it cannot guarantee generation of sufficient revenues which in turn can ensure availability of essential supplies and equipment on a regular basis unless there is another dependable source of income.

Another factor is that although in both types of hospitals there are two main types of outpatient services (basic curative and preventive services) yet not all services are charged for by both types of hospitals. Besides that their charges differ. For example, while medication fee in public hospitals is US $ 0.09, in private hospitals it ranges between 0.17 and 0.34. Also while such preventive services as MCH services are delivered entirely free of charge in public hospitals to pregnant women and children underfive years old, in private hospitals some of preventive services are charged for lower rates depending on the age and the level of care. In order to recover some basic care expenses, for instance, private hospitals charge children under five years old fees ranging between 50% and 75% of the adult fees.

A different setback springs from the response made by public hospitals to outpatients unable to pay for the sought care. Although the results show there are fewer cases in public hospitals than

in private hospitals, yet eligible applicants are automatically granted exemption in public hospitals on two grounds. The type of disease one is suffering from and one's poverty level. Whereas in private hospitals, one is only granted exemption upon provision of a dependable proof of inability to pay or on meeting agreed conditions e.g. one can be attended on credit. However, an interesting research question which remains unanswered in this regard is how additional costs proceeding from reduction of the pool of those required to pay are met?

The results also reveal that the staffing level in public hospitals by category has been on decrease both before and after the introduction of cost sharing. This might also justify why staff have not been satisfied with their work schedules. Other factors causing staff dissatisfaction include failure to pay them call allowances, no payment in case one is injured during work, and poor staff salaries. Also according to findings obtained, although physical facilities in public hospitals were expected to be on increase as a result of the introduction of cost sharing, yet they did not. Instead for most facilities remained constant as before the introduction of cost sharing while the level of shortage of motorvehicles increased by 2.

In order to verify the above findings an additional question was posed to health professionals, outpatients and household heads interviewed on what was their perception on the quality of outpatient services in public district hospitals before and after the introduction of cost sharing. In common, results obtained from these three groups also reveal that the quality has either remained constant as before the introduction of cost sharing or it has decreased due to:

a) Public hospitals have no right to revise fixed user fees by MOH;
b) Poor supervision over fees collection and expenditure;
c) Inadequate supply of essential supplies e.g. drugs on a regular basis and their control;
d) Too much bribery; and
e) Bad attitude towards patients among some of services providers.

4.1.2 The Relationship Between the Financing Position of Outpatient Services in Public District Hospitals Before and After the Introduction of Cost Sharing

Although the results show that there has been a notable improvement in the financing position of outpatient services in public district hospitals after the introduction of cost sharing, this finding becomes questionable on the following grounds:

a) The analysis of responses given to the question on whether outpatient services are allocated any share from revenues generated through user fees show that in practice there is no demarcation between basic curative and preventive services. Also although the results reveal that the only items benefitting from collected revenues include staff salaries, essential supplies and equipment, renovation of hospitals buildings and running costs, one wonders why there is inadequate supply of essential supplies in public hospitals as opposed to private hospitals? In this context, indicators used to measure the noted improvement in the level of financing outpatient services become unjustifiable;

b) Although findings obtained also show there are four main sources of funds including donations, user fees, warrants of funds from the central government and grants for hospitals with the aided staff, yet lack of data on contributions made by each source for two periods (1991/92 - 1992/93 and 1993/94 - 1994/95) could not allow this study to determine in measurable terms the above drawn relationship;

c) There is revenue loss through automatic exemptions granted in public hospitals. This in turn threatens sustainability of the financing position of outpatient services in these hospitals in that such an exemption scheme reduce the pool of those required to pay;

d) There is revenue loss through the rigid charging system used in public hospitals because this system does not take into consideration local needs of the respective public hospitals, buying price(s) per supply dispensed and the type of disease attended; and

e) There is also revenue loss through poor supervision over user fees collection and expenditure.

4.1.3 The Relationship Between the Delivery of Outpatient Services in Public District Hospitals Before and After the Introduction of Cost Sharing

Test results for the third hypothesis which was used to determine the relationship between the delivery of outpatient services in public district hospitals in Tanzania before and after the introduction of cost sharing reveal there was no significant difference as shown in Table 8 above.

This finding is justified by the fall by 5% of outpatients attendance for basic curative services in public hospitals. Health professionals interviewed in this regard strongly associate this fall with poor supervision over user fees collection and expenditure. Whereas both outpatients and household heads firmly associate this fall with:

a) Lack of essential supplies and equipment and their control especially drugs;
b) Too much bribery in that *'no money no care'*;
c) Unaffordable user fees; and
d) Bad attitude towards patients among some of services providers.

In establishing why the above mentioned were the burning issues among outpatients and household heads the results show that indicators they use to measure quality services are basically three. Availability of essential supplies in the hospital on a regular basis, dependable professionalism in treating them, and affordability of user fees. But in practice they normally do not get prescribed drugs from within public hospitals in that they are normally not available. Instead they usually resort to private pharmacies. For those who find the fees unaffordable they normally either go for self-medication or traditional healers. The danger of self-medication,

however, is that physicians and pharmacologists who have studied the consequences of self medication report a wide variety of hazards including delaying the recognition of serious disorders. Persistent of headaches dosed with asprin, for instance, have hidden brain and eye disorders [75].

Too much bribery, which was also recently confirmed by the preliminary findings of the Anti-Corruption Committee in Tanzania in all key sectors [76], threatens both equity of and accessibility to delivered outpatient services because those most in need of the care may be deprived of their right at the expense of those who have the cash.

With affordability of user fees, although the results obtained show that charged fees are affordable in that out- of- pocket money is the commonly used method in raising the required funds for the sought care by both groups, yet as revealed in Table 9 below the average earned monthly income by one group makes the above finding questionable. 92.6% of 216 outpatients disclosed their monthly average income in both types of hospitals earn the lowest income level ranging between US$ 8.62 and 51.72 monthly. After cross tabulating this monthly income with the total amount spent in seeking for care during the most recent consultation, findings reveal that outpatients seem to spend between US$1.72 and 3.45 on health care which represents about 7.5% of their average income level. This level might have risen even higher if the annual total number of visits made by each outpatient were determined. Whereas to households spending between US$ 1.72 and 3.45 on health care to them it represents around 6.7% of their average income level.

Table 9: Income Levels for Outpatients by Type of Hospital.

Patient Category	Type of Hospital	Income Levels in US $				
		Uncertain	8.62 – 51.72	51.72 – 94.83	94.83 – 137.93	137.93+
Outpatients	Public	-	93	4	-	3
	Private	1	108	4	1	2

Source: Data obtained using Outpatient Questionnaire

For preventive services like delivery of health education, underfives growth rate monitoring and delivery of antenatal care to pregnant women findings show that these services are entirely delivered free of charge to pregnant women and children underfive years old in public hospitals. In private hospitals, however, some of these services are charged for lower rates depending on the age and the level of care. The results also reveal that although in private hospitals there has been a decrease in the total annual number of outpatients delivered with preventive services, in public hospitals it has been on increase. The increased attendance of homes delivered with health education, underfives and pregnant women was the main indicator used to measure the noted improvement in delivery of preventive services.

4.1.4 Other Factors Affecting Outpatient Services Management, Financing and Delivery in Public District Hospitals

Inspite of introduction of cost sharing in public district hospitals, the results obtained reveal the

following as additional contributing factors for an unimproved management, financing and delivery of outpatient services in these hospitals.

4.1.4.1 Managerial Factors

These include:

a) Lack of automnomy among public district hospitals which could enable them to ensure their charging system reflects both the buying price(s) per supply dispensed and the type of disease attended;

b) Poor supervision over user fees collection and expenditure;

c) Inadequate supply of essential supplies e.g. drugs on a regular basis and their control;

d) Poor staff salaries which do not take into account risks staff are exposed to during work;

e) Too much bribery; and

f) Bad attitude towards patients among staff.

4.1.4.2 Financial Factors

These include:

a) Revenue loss due to automatic exemptions, the used rigid charging system in public hospitals, and through poor supervision over user fees collection and expenditure; and

b) Meagre budget allocated to public district hospitals.

4.1.4.3 Delivery Factors

These include:

a) Lack of essential supplies and equipment and their control especially drugs; and

b) Too much bribery.

4.2 Conclusions

4.2.1 The management of outpatient services in public district hospitals even after the introduction of cost sharing is not yet improved.

4.2.2 Although the results obtained seem to conclude that there has been a slight notable improvement in the financing position of outpatient services in public district hospitals, in practice this seems not to be the case.

4.2.3 For basic curative services, there has been a slight fall of outpatients attendance in public district hospitals. For preventive services, which are entirely delivered free of charge to pregnant women and children under five years old in public district hospitals there has been an increase in the annual total number of outpatients delivered with these services even after the introduction of cost sharing.

4.2.4 Although the results obtained reveal that charged user fees are affordable, yet the average monthly income earned by outpatients and households interviewed makes this conclusion questionable.

4.2.5 Quality of delivered outpatient services in public district hospitals has either remained constant or decreased.

4.2.6 With too much bribery in the midst of inadequate supply of essential supplies in public hospitals, delivered outpatient services are both inaccessible and not equitable.