ACCESSIBILITY AND SUSTAINABILITY OF HEALTH SERVICES IN IRAMBA DISTRICT

THREE YEARS AFTER COMMUNITY HEALTH FUND IMPLEMENTATION

BY

HAMIS MSENGI MWENDO

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC HEALTH OF THE UNIVERSITY OF DAR ES SALAAM

2001



Certification

The undersigned certifies that he has read and hereby recommend for acceptance by the University of Dar-es-Salaam a dissertation titled "ACCESSIBILITY AND SUSTAINABILITY OF HEALTH SERVICES IN IRAMBA DISTRICT, THREE YEARS AFTER COMMUNITY HEALTH FUND IMPLEMENTATION, SINGIDA, TANZANIA" in partial fulfillment of the requirements for the degree of Master of Public Health

Supervisor's Signature:.....

Phare G M Mujinja BA (Hons), CIH, MPH, MA(Econ)

Date: 27.09.01

DECLARATION

I declare that the work contained herein is my original work, and that it has not been submitted for a similar degree in any other University.

HAMIS MSENGI MWENDO



Candidate's signature

STATEMENT OF COPYRIGHT

No part of this dissertation may be reproduced, stored in any retrieval system, or transmitted in any form by any means: electronic, mechanical, photocopying or otherwise, without prior written permission of the author or the University of Dar es Salaam in that behalf.



Acknowledgements

I would like to express my profound gratitude to my supervisor Mr. PGM Mujinja, senior lecture of the Institute of Public Health, of the Muhimbili collage of health sciences for his invaluable guidance, suggestions and encouragement towards the production of this document.

A number of people have made useful contribution towards this study at its various stages of development, including comments, criticisms and support with references materials. They include: Dr Zul Premji, Master Of ublic Health Course Coordinator, Dr Asia M. Hussein, Lecture of the Institute of Public Health, Mrs C Moshiro, from Department of the Biostatistics and Epidemiology, Mr. F. Mayunga, from the Department of Epidemiology, Dr D. Urassa, from the Department of Community Health , Dr JKM Chuwa, head of the Department of Emergency Preparedness, Ministry of Health, Dr FK Njau, Technical Consultant and field coordinator of Community Health Fund,Ministry of Health.

Due recognition needs to be given to my sponsor, Ministry of Health and DFID who made it possible for me undertake my course.

I would also like to thank the District Health Management Team of Iramba district, Acting. DMO, Dr. Maruba, Medical Officer in charge, Dr Mazuki and Mr. R Samwi DistrictCold Chain Officer, for valuable logistic support during the fieldwork phase.

I would like to thank my wife Mariana Ilieva, my sons Victor and Dennis and my daughter Vanessa for bearing with me when I was too busy with my research and write-up,when I could not give them all the time and attention that they rightly deserved.

I am highly indebted to my brother Shamsengi Ramma for his moral support throughout my study period.

Lastly, but not least, I would like to thank my fellow postgraduates students in the Institute of Public Health for their encouragement.

DEDICATION

I would like to dedicate this work to my wife **Mariana Ilieva**, to my sons **Victor** and **Dennis** and to my daughter **Vanessa**.

ABSTRACT

Community Health Fund (CHF) was introduced in Iramba district in June 1998. CHF is one of the alternative financing mechanisms that has been introduced following the government failure to meet the cost of the public health services in the rural communities. Low CHF enrollment has negative implications on both revenue generation and exemption for the poor.

The trend of low CHF enrollment may lead to unsustainable health care services. Several factors might have influenced the enrollment. Therefore, the study focused on the important factors which may influence the improvement of access and sustainability of health care system.

The broad objectives were: To assess the accessibility to health care services among CHF and non-CHF members at the household level and to assess sustainability of health services under CHF scheme in Iramba district.

A household survey, Focus Group Discussion, (FGD) and key informant interviews were used to collect information. The study population constituted heads of households or their representatives in Iramba district. In this respect, a household was defined as a monogamous marriage or single parent or a guardian and children who are under eighteen years of age. In case of polygamous relationship, the different wives were

regarded as belonging to different households. This definition was adopted from the CHF scheme in Tanzania.

Multistage random sampling was used to select households for the structured questionnaire interviews. A simple random sampling was used to select health facilities and correspondingly, households were selected by the same method from the facilities catchment areas. A total of four health facilities were selected and for each health facility, two villages were selected. In total of 212 households were interviewed.

For the focus group discussion, a total of eight health workers, two from each health facility were selected. The in-depth interview was conducted with CHF managers. Selection was done according to their position in the managements of the CHF.

The data was analyzed using an EPI Info program. Where appropriate, statistical tests were carried out. The 0.05 cut off point was used to interpret the p value.

Most of households were found to be located not more than five kilometers from health facility. It was found that most (95.8%) of the households were aware of CHF. Village meetings and health facilities were identified as the main source of awareness about CHF. The study findings revealed that the current household membership rate was 50%, where, 43.5% were members who enrolled since 1998, and among household interviewed, about 9% had dropped from CHF. The rate of recruitment of new members was 4.1% in the year 2001.

The level of education and the nature of occupation were found to have a substantial influence on CHF enrolment. As the level of education increases awareness and CHF enrolment also increases.

Association between self reported income of the household and CHF membership was found not to be a determinant of CHF enrolment. The willingness of people to enroll in CHF was conditioned by the availability of drugs, easy accessibility of services and improvement of the general quality of care of the services.

It was seen that, the promises from CHF management to health workers likebenefit packages were not fulfilled up to rhe time this research was conducted.. Hence, that may have affected the health care provision.

The CHF scheme in Iramba district was not yet fully functioning despite the fact that, revenue collection continued. The funds were still kept unused in the bank. Delivery of health care services was not yet improved, so consumers' expectationsof good quality health care were not yet met.

Recommendations: Guidelines for utilization of funds should be transparent, and the bureaucracy for approval of funds use should be shortened for the purpose of improving quality of service and that would attract more individuals to enroll in the CHF.

To ensure sustained CHF promotion campaigns should be continuous, and more focused for individuals' benefits of enrolling as a CHF member.

TABLE OF CONTENTS:

Certification ii

Declaration iii

Statement of copyright iii

Acknowledgements v

Dedication vii

Abstract viii

List of abbreviations xiii

Definition of terms xiv

Introduction 1

Problem statement 3

Rationale of the study.. 4

Literature review 6

The conceptual framework 9

Broad objectives 12

Specific objectives 12

Methodology 13

Reasons for choice of study area 13

Study design 13

Description of the study area 13

Sampling 14

Households sample size 15

Households sampling 15

Health workers sampling 16

Sampling of CHF administrator 16

Ethical issues 17

Data collection instruments 17

Household survey 18

Focus groups discussion to health workers and in-depth interview

on CHF administrators 19

Data entry, validation and analysis 19

Study limitations 20

Results 21

Results of the household survey 21

Accessibility of health services 26

Awareness about CHF 26

CHF membership at the household level 28

CHF enrollment pattern in the 1998-2001 period and currently

Among households that were aware of CHF 29

Perception of CHF 30

Willingness and financial ability to maintain CHF membership .. 32

Willingness and financial ability to enroll as CHF members.. .. 33

Illness episode at the household level.. 34

Satisfaction with health care 37

Focus group discussion results 39

In-depth interviews to management of CHF 43

Discussion 45

Conclusion and recommendations 51

References 52

MEDICAL LIBRARY ★ DAR ES SALAAM

LIST OF ABBREVIATIONS

CHF	Community Health Fund
DMO	District Medical Officer
GTZ	German Technical Cooperation
HSR	Health Sector Reform
IMF	International Monetary Fund
IPH	Institute of Public Health
MOH	Ministry of Health
MUCHS	Muhimbili University Collage of Health Sciences
TDHS	Tanzania Demographic and Health
Tsh	Tanzanian Shilling
WB	World Bank
WHO	World Health Organization

DEFINITION OF TERMS

Accessibility: Availability of health services when needed.

Cost efficiency: To obtain greater value of money spent for health activities

Cost sharing: Is a system of paying for health services delivered and the rest of the cost is met by a third party (insurance companies, Government, Donors)

Effectiveness: Application of any health input or services has Some beneficial impact on health condition.

Equity: Equal likelihood of obtaining access to adequate and affordable preventive, promotive or curative care when it is needed.

Household: In relation to implementation of Community Health Fund, a household is defined as a nuclear family including the father, mother and children under 18 years of age.

Sustainability: Continuity of provision of health services around the year.

Prepayment: Paying in advance for health care.

Risk- sharing: Is a system of paying for health services in advance before getting ill health, the membership valid for a certain period. Then has to be renewed after expire of

the date regardless the concerned person utilized health services or not.

Ward: An Administrative sub-division in a district which is divided into villages.

1.0 INTRODUCTION

Access to and utilization of health care are inequitable in many developing countries particularly in sub – Saharan countries (Walter, 1995). Inequitability is mostly in rural areas where majority of the population lives than in urban areas. Rural population has limited access to health care and the facilities to which they have access are generally of lower quality (Fromer, 1983). In addition most of families in rural areas are poor and do not have enough income to cover the cost for health care services.

After the Arusha declaration in 1967, the government of Tanzania made decision to provide health care to all citizens at no direct charge to the users. Due to the government plan, the number of public health facilities increased massively in 1960s'-1980s. Number of hospitals had increased by 56.2%, health centers by 94.2% and dispensaries by 80.4%, (Mombo, 2000). The population growth of people and shrinking of resources, have constrained many governments health care funding, (Newbrander and Colins, 1995). The health infrastructure, which had been put in place in 1960s to 1980s by the government of Tanzania, could not be sustained as the government faced difficulties in financing the health sector.

The global economic reforms in the form of structural adjustment, led to reduction in subsidies, which affected public spending in social sector. The reduction in central government spending on health sector in Tanzania dropped from 7% to 3.3% in 1979

and 1986 respectively (Njau, 1999). The structural adjustment programme, therefore led to a crisis in the health sector and adaptation of health reform packages (Cassel, 1995). The main advocates of health sector reform were IMF and World Bank.

In Tanzania, following the local adaptation of the health reforms packages, the following categories were adopted; ideological reforms, organizational reforms, financial reforms, public/private mix reforms, review of health policy reform, research reforms, nutrition reforms and population reforms (MOH, 1999).

Along each of the reform agenda, are proposals that collectively aim at: -

- Empowering district, community and household initiative through development and implementation of proper district health plans.
- Seeking alternative financing options which will bridge the existing financing gap in the health sector,
- Continuous revision of the implementation of various acts, ordinances and regulations pertaining to health management and administration.

It is within the background of financial health sector reforms that the Community Health Fund (CHF) has been introduced in Tanzania and pre tested in Igunga since 1996.

Two years later, in 1998 the Community Health Fund was introduced in Iramba district. Iramba district is among the poor districts in Tanzania. The Iramba CHF model has the same characteristics as that of Igunga which in-cooperates prepayment for medical care

as risk sharing, has exemption criteria for the poor and community involvement in leadership and financial matters (MOH, 1999). The emphasis is to make equitable and universal availability of essential health care at a cost which the community can afford, where the poor and the vulnerable groups are given special attention. The priority is towards strengthening the health infrastructure and community participation. To achieve the above, awareness of the individual, the family and the community must be raised on the need for action to improve their health status.

1.1 PROBLEM STATEMENT:

Community Health Fund was introduced in Iramba district in June 1998. Ministry of Health, consultant report (1999), reported 5.5% of total household had registered for CHF membership after the introduction of the scheme. The registration declined from 5.5% to 0.1% from June 1998 to March 1999, respectively. In general, enrollment of households to CHF was very low. Several factors might have influenced CHF enrollment. Kapinga and Kiwara (1999) identified some possible reasons for low membership of CHF enrollment in Igunga district. Financial constraints among others, was identified as one of the most critical reason. Other reasons mentioned includes distance to a health facility, single family (divorced and widowed), low sensitization and mobilization of the community. The influence of the above-mentioned reasons on CHF enrollment and accessibility of health services in Iramba district cannot be ruled out, despite of cultural and geographical differences in the two district.

The Ministry of Health, consultant report (1999), also reported low utilization of public health facilities in Iramba district, with 48.4% of CHF members visiting facilities that they were not enrolled in. People preferred to seek health services from mission health facilities and this was reported to be influenced by availability of drugs and basic laboratory services good, staff attitude and cleanliness of the mission facilities(MOH 1999).

The low access to public health care services may possible be the outcome of failures and shortcomings of the health care system to solve the problems of the population (Robinson & Kleiner, 1997). The failure of health care system maybe contributed by absence of clear health policies (Milio, 1997), or poor design of the system, low community participation of the scheme, poor administration of the scheme, problem on assessing ability to pay at the initiation of the scheme or people have other priorities on health care decision (Abel-Smith et al, 1998). Therefore, this study is going to assess factors influencing accessibility of health care services and its sustainability of health care services at the household level in Iramba district following introduction of CHF and give suggestions to improve health care services.

1.2 RATIONALE OF THE STUDY:

In order to assess the sustainability of any program or project we should consider its revenue generating mechanism(s). CHF is one of the alternatives financing mechanisms

LIBRARY ★ MEDICAL ★ DAR ES

that was first introduced in Igunga rural community in 1998 following the government failure to meet the cost of the public health services.

By the end 1999, CHF scheme had rolled out to ten districts in Tanzania. The districts are Igunga, (pilot area), Nzega, Singida rural, Iramba, Hanang, Songea rural, Songea urban, Mbinga, Kilosa and Iringa rural. The Igunga experience shows that there was a wide discrepancy between achieved CHF membership level and the target enrollment (Kapinga and Kiwara, 1999). Existence of similar low enrollment it cannot be ruled out in other CHF districts.

Low CHF household enrollment has negative implications on both revenue generation and exemption for the poor (Ongwae, 2000). The exemption restriction therefore implies that with the low household enrollment, very few eligible households are benefiting from the exemption mechanism.

The trend of low CHF enrollment may lead to unsustainable health care services, where the most affected people are the poor and vulnerable groups, morbidity and mortality many tremendously increase. Hence, the study findings will facilitate the formulation of evidence based targeted interventions to improve CHF enrollment as well as to sustain health delivery system in the district and elsewhere.

1.3 LITERATURE REVIEW:

Before the current movement of health sector reform, the international health agenda was led by the policies of health for all and primary health care (WHO /UNICEF, 1978). On the Alma Ata declaration before the 1979-1981 oil prices precipitated the longest recession in the industrialized countries. The recession in turn precipitated a macroeconomic crisis in many developing countries especially in Latin America and Sub-saharan Africa (World Bank, 1983; Segall, 2000).

Many developing countries suffered negative economic growth, reduced government revenue and increasing poverty. As a results the ideology of free health for all, provided by the governments was phased out and the burden shifted to individuals, communities and private sectors. Among other things in Tanzania, in order to ensure all categories of people enjoy quality medical services, the government introduced the reform agenda (MOH, 1994). In this reform a number of strategies to generate revenues were suggested, such as cost sharing and risk sharing .The alternative health financing based on the above strategies include: -

a) Prepayment schemes, a form of risk sharing: CHF.

b) Fixed payment per sickness episode, a form of user fees.

c) Fee for services (payment at services, user fees, user charges).

d) Community health insurance, (MOH, 1999).

Direct payment by users has been observed to affect the utilization of health services by the poor and other vulnerable groups (Stierle et al., 1999). Therefore, people decide to go to traditional healers or traditional birth attendants for treatment. Those who could not go to either of the above mentioned alternatives; they opted for self-medication and buy drugs from shops or pharmacies (MOH, 1999).

In Tanzania, more than 50% decline in utilization of out patient services in public health facilities in Dar-es-salaam was observed, following introduction of user charges in 1993, (Hussein, 1995 Hussein and Mujinja, 1997). There was a decline of about 89% in utilization of services at Mpwapwa district hospital after introduction of cost sharing (Gembe, 1996). The decline was associated with; poor quality of health services, inability to pay and some users not willing to pay.

Only in a few places and especially when it is accompanied by some other policies, cost sharing measures through direct payment of fees have been noted to have a potential of increasing efficiency in quality of health services provision. However, only a small proportion of total health care cost is recovered through cost sharing. Most of the cost sharing schemes are also characterised to have poor administration of exemption mechanism and its abuse (Mwabu et al, 1995).

It is possible that eligible poor patients are denied access to health care services by implementing the cost sharing measures. It is a consideration for health policies to focus

on both, the equity and efficiency in health care provision. Consequently, there is renewed interest on insurance and prepayment schemes. Both are based on the principal of risk sharing and hence have a potential for more equity in health care access (MOH, 1999).

Sharing the risk means that those who get sick will benefit from the fund by deriving benefits, which outweigh patients contributions in monetary terms. In order to pull funds so as to allow risk sharing, the decision-making and authority to utilize the funds have been put in the hands of the community leadership. Patients choice of a facility will encourage providers to compete thus creating efficiency in service provision (MOH, 1999).

Community based risk sharing scheme are in operation in several developing countries. A similar scheme operates in Philippines (GTZ / DOH, 1996), and Bolivia (Toonen, 1995). In the Sub-saharan countries a workable risk-sharing scheme has been identified as pillors for sustainable health care system (Korte et al 1992). Creating efficient, equity and quality in health service provision could be the ways to increase consumer satisfaction. Several variations of risk sharing schemes can be identified as not health insurance schemes in a strict sense but operate on basis of risk sharing and prepayment. Specific examples include; traditional solidarity involving clans and ethnic groups in Cameroon, health associations involving professional and trade unions, more advanced

MEDICAL LIBRARY

medical aid societies in Zimbabwe and South Africa and local health insurance (Atim, 1999).

Other examples of risk sharing in East Africa are health society of Kisiizi hospital in Uganda, Chogoria hospital in Kenya, Mburahati and Vingunguti health insurance in Tanzania (Musau, 1999).

Most of the prepayment schemes have only managed to attract very low membership; hence hardly any risk sharing and care exposed to negative effect of adverse selection (Musau 1999). Possible explanations of low enrollment rates includes; poor design (Creese and Benneth, 1999), low community participation of the scheme (Atim, 1999), poor administration of the schemes (Korte et al 1992), problem in assessing ability to pay at the initiation of the schemes (Korte et al 1992), people being too poor to afford paying (Abel-Smith et al 1998) and people have pressing priorities (Abel-Smith et al 1998). However, health care reform processes are in motion and in all countries of the world.

1.2.1 The conceptual Framework: -

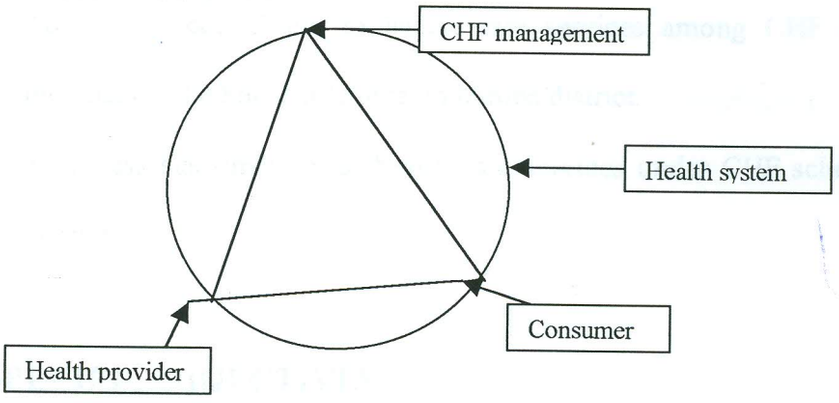
The concept of community health fund (CHF) in Tanzania is mainly to provide a health care financing mechanism based on security for health care at time of critical need. CHF will facilitate risk sharing among many healthy people and patients who do not have to

pay on the spot at the time of illness, provided they have voluntarily paid their CHF contribution.

The CHF concept can be seen in three aspects includes CHF management, heath providers, and the consumers. The consumers "households", their enrollment in CHF will possible sustain heath care services. CHF gives a leeway to the resource weak households to take an option of paying during harvesting time and enjoy services throughout a year. On the other hand , heath providers seen as a critical role in sustaining the health care services. Well motivated and satisfied, may promote staff performance and productivity.

The financial planning and managerial skills are seen as a potential means of ensuring greater security of access to health care, empowering households and communities in health care decision, promoting cost sharing with strong local participation. Fig. 1.0 below shows the relationship among the three dimensions stated above.

Fig. 1.0 **The conceptual framework of CHF**



2.0 STUDY QUESTIONS

1. What proportions of people were aware of CHF in Iramba district?
2. What proportions of households were enrolled as CHF members since 1998?
3. What were the expected benefits to health providers towards CHF prepayment scheme in Iramba district?
4. What were the problems experienced by consumers and providers towards CHF prepayment scheme in Iramba district?
5. What proportion of CHF and non CHF members utilizing public health facilities.
6. What are the factors that influenced people to maintain their CHF membership.
7. What are management factors that enhance existence of CHF?

2.2 BROAD OBJECTIVES

1. To assess accessibility to health care services among CHF and non-CHF members at the household level in Iramba district.
2. To assess sustainability of health care services under CHF scheme in Iramba district.

2.3 SPECIFIC OBJECTIVES

1. To determine the proportions of households who are aware of the CHF.
2. To determine the proportions of households that enrolled as CHF members since 1998.
3. To determine the expected benefits to consumers (CHF and non CHF) from CHF prepayment scheme at the household level.
4. To find out problems experienced by consumers and health providers on CHF prepayment scheme.
5. To determine utilization of health facilities between CHF and non-CHF members.
6. To determine factors that influence household to maintain CHF membership.
7. To determine management factors that enhances existence of CHF.

3.0 METHODOLOGY

3.1 Reasons for choice of study area.

The Iramba district is one of the first pilot areas for CHF. Its among the poorest districts in Tanzania which need attention for improving affordable and sustainable health services. CHF was introduced three years ago, (1998), and there is need to look at its effect on accessibility of health services to the rural community.

3.2 Study Design

A cross-sectional study was conducted in Iramba district in three Wards from 25, June to 09 July, 2001. The study involved rural health facilities and households. The rural health facilities survey was conducted in the four-government health facilities, namely: New Kiomboi dispensary in Kiomboi Ward, Misigiri dispensary in Ulemo ward, Shelui dispensary and Mgongo Health center in Shelui ward.

The household survey was conducted in eight villages, whereas, two villages were selected from each health facility catchment's area.

3.3 DESCRIPTION OF THE STUDY AREA

Iramba district lies between latitude 3.5 degrees south of equator and latitude 34.35 degrees east of Greenwich. It shares borders with Meatu district to the north, Igunga to the west, Singida to the southeast and Mbulu to the east. Annual rainfall is between 500 mm and has an average temperature of 21 –27 degrees centgrade. The district has an

area of 7,900 sq km. Administratively it is divided into 7 divisions, 26 wards, 118 villages and 690 harmlets. Presently the population is estimated to be 376,648, (1998 projection). The main tribes of the district are Nyiramba, Nyisanzu and Nyaturu. Others are Barbaig, Hadzabe and Taturu.

The district has a total of 57 health facilities, including 2 hospitals, 4 health centers and 51 dispensaries. Disease burden in Iramba district is characterized by high incidence of malaria, respiratory tract infection and diarrhea diseases.

3.4 Sampling
3.4.1 Health Facilities.

A simple random sampling method was used to obtain four health facilities in the study. A lottery system was used to select the required number of health facilities. This was done after obtaining a list of government health facilities in the district with exception of hospitals. All names of health facilities were written in small pieces of papers then were put in a small container. By lottery method, each time one name was picked up and recorded. The picked name then returned in the container. The same procedure was repeated until the required number of health facilities was obtained. The same method of simple random sampling was used to obtain the study villages. The villages were grouped according to the distance from a selected health facility. The villages were divided into two groups: less or equal to five kilometers and those located in more than five kilometers from a selected health facility. From each group, one village was randomly selected and made a total of eight villages.

3.4.2. Sample size calculation

The sample size was calculated using a formula in the EPI INFO program. $N=(1.96+1.28)^2 [p1 (1-p1)+p2 (1-p2)]/(p1-p2)^2$.

The information below was substituted into the formula for estimating the sample size: -

- Proportion of utilization of public health facilities is compared between CHF and non-CHF members.
- The CHF members utilizing public health facilities estimated to be 52% (MOH, 1999) and non-CHF assumed to be 75%. This is p1 and p2 respectively. (Refer page 3, paragraph 2).
- The desired sample size is 100 households in each group.
- N= 200 households.

3.4.3. Households sampling.

Using a list of CHF and a list of non-CHF members obtained from Village Executive Officers (VEO) a systematic sampling of households within the study villages was done. A total of 212 households (CHF and non CHF members in equal number) were selected and interviewed.

Every 2nd household in the list were included in the study. If no one was found in 2nd household, the 3rd household was included. The head of the household was in most

cases interviewed, and if the head of the household was not present, another representative adult household member was interviewed. Each interviewer was required to interview the minimum of 15 households per day. There were four interviwers.

3.4.4. Sampling Health Workers

As there were few health workers in rural health facilities, the in-charge of health facility and one other person picked randomly, preferably a nurse were selected for interview. If there were only two health workers in a health facility, then they were both included in the focus group discussion. Two health workers represented each health facility. Eight health workers from four health facilities participated in one focus group discussion.

3.4.5 Sampling of CHF administrators

The CHF management was purposeful selected. The selection was based on the interviewees position in management. One respondent from administration, finance, social welfare, monitoring and evaluation sections was included in the in-depth interview. The District Medical Officer as the secretary to the DHB, CHF cash collector and a social worker were interviewed. DMO was also interviewed on monitoring and evaluation issues as a health planner.

3.5 Ethical Issue

Permission to conduct research was obtained from relevant authorities. These included MUCHS authority, District Medical Officer and District Executive Director. Consent from the households' respondents, health workers and CHF administrators were also solicited for being interviewed.

3.6 Data Collection Instruments

Four research assistants were recruited to assist the principal investigator in data collection. Their selection was based on the following criteria: Fluency in Swahili and Kinyiramba, willingness to be member of the research team, must be available during the whole study period, above 18 years of age, knowledge on conducting interviews and willingness to work long hours.

They were trained for one day on interview skills and how to fill the questionnaires. The household questionnaires in Swahili language were pre tested at Iramba district hospital to asses peoples' response to the various questions listed. A total of 10 people were interviewed and were thereafter not included in a study sample, because district hospital was not included in the study. Then, relevant changes and modification were made. The interview guide was used for Focus Group Discussions and In-depth interviews.

3.6.1 Household survey

Interviews using a constructed Swahili questionnaire were done. The questionnaire consisted of three parts: Part A, was the information on characteristics of the respondent including age, sex, marital status, household size, education, occupation and religion.

Part B, was the information about Community Health Fund prepayment scheme. The information collected included awareness of CHF scheme, perceived benefit of CHF, experienced problems of CHF and willingness and ability to enroll.

Part C, was the information about utilization of health services in the past one year. Most questions were closed-ended and few were open-ended.

A household interview lasted between 20 to 30 minutes.

With the district hospital being the central point, early in the morning the four research assistances and principle investigator, traveled to the survey areas to carry out interviews. After arriving at the arranged health facility on that day, self-introductions to the in charge of the health facility and village leaders were conducted. Then research assistants separate into two groups. One group worked at the village, near to the heath facility and the other group moved to the far village. The far villages in this study was regarded as those situated more than five kilometers from health facility, and near were those situated below five kilometers.

3.6.2 Focus group discussion to health workers and In-depth interview on CHF administrators

Focus group discussions (FGDs) of eight health workers from different health facilities in the study was conducted. The FGDs aimed at getting the provider's perspectives on CHF scheme, and its effects on utilization of health services, and the exemption mechanism. The respondents were one Rural Medical Aide, three Clinical Officers, one Maternal and Child Health Aide, two Nurse Assistants and one Health Assistant.

The selected CHF administrators were interviewed in their offices by the principal investigator.

The interviews was conducted in Swahili and the responses were later translated in English by the Principal investigator.

3.2.7 DATA ENTRY, VALIDATION AND ANALYSIS

In the course of the fieldwork the principle investigation assisted by the District Cold Chain officer (DCCO) of Iramba district, who was also a field assistant, checked all questionnaires. There were no errors detected. All questionnaires were then coded and given serial number by the investigator.

Computer data entry was done using an EPI info program. The coded variables were tested by a chi-square test. The P value was recorded where necessary. Comparison of means was done using t- test. The author analyzed the in- depth interview results. The report of interview then prepared by recording opinions expressed by the interviewee.

3.2. STUDY LIMITATIONS

a) Households in some villages were very scattered and it took sometime to move from one household to the next for interview. Therefore, more time was consumed for interviewing few respondents.

b) Most residents in Mseko village were not permanent dwellers, so it was very difficult to get them for the interview, as a result, only few households were interviewed from this village.

c) The time to undertake the study was not enough.

4.0 RESULTS

4.1 Results of the household Survey

4.1.1 Demographic profile of study population

The demographic profile of heads of respondents interviewed is shown in table 3.1. A total of 212 heads of respondents were interviewed. Of all interviewed respondents, 106 were CHF members and 106 were non-CHF members. The majority of the respondents were males, who comprised 76.4% of all who were interviewed. The median age of the respondents was 41years.The age group 20-29 years consisted of 9.9% of all the interviewed respondents and above 30 years old about 90%.

The majority of respondents were Protestants, who comprised 52.8% of all heads of household interviewed. Moslems were 31.6%, followed by the Catholics 8.1% and 7.5% were from other dominations.

A total of 74.2% respondents reported to be in monogamous marriages, 9.9% were in polygamous marriages, whereas 7.0% were separated. The remaining percentages 5.2% and 3.3% were ever married and divorced, respectively.

Table3.1 shows that , more male respondents (82.1%) had monogamous relationships than female respondents (49%).Whereas, 51.0% of female heads of household were not married compared to male 4.9%.

Table 3.1 Characteristics of respondents according to sex

(N=212)

Characteristics	**Male**	**Female**	**Total**
Age	N %	N %	N %
20-29	11 (6.8)	10 (19.6)	21 (9.9)
>30	151 (93.2)	41 (80.4)	192 (90.1)
Total	162 (100.0)	51 (100.0)	212 (100.0)
Religious			
Catholic	16 (9.9)	1 (2.0)	17 (8.1)
moslem	55 (34.0)	12(24.0)	67 (31.6)
Protestant	75 (46.3)	37 (74.0)	112 (52.8)
Others	16 (9.9)	0 (0.00)	16 (7.5)
Total	162 (100.0)	50 (100.0)	212 (100.0)
Marital status			
Monogamous	133 (82.1)	25 (49.0)	158 (74.2)
Polygamous	21 (13.0)	0 (0.00)	21 (9.9)
Not married	8(4.9)	26(51.0)	34 (16)
Total	162(100.0)	51(100.0)	212 (100.0)[1]

Table 3.2 shows that, respondents who had at least primary education were more likely to be enrolled in CHF than those who had informal education. About 64% and 28.8% of

MEDICAL LIBRARY DAR ES SALAAM

respondents who enrolled in CHF, were found to have primary and secondary education respectively. Among all respondents who reported their occupations, 69.2% were subsistence farmers and 26.8% were employed. Only 4% of all respondents were business people. The self reported annual income was compared to CHF membership characteristics. Those who earn more than 50,000 Tshs per year, had higher enrollment in CHF, by 83.7%, and those who reported to earn between 20,000-50,000 Tshs by 12.5%. The least group in CHF enrollment were those with reported income of below Tshs 10,000, by 3.8%. Twelve respondents did not report their income.

Table 3.2 Social economic profile of study population by CHF membership

Profile	**CHF members**	**Non-CHF members**	**Total**
Education level	N %	N %	N %
Informal	4 (3.8)	23 (24.0)	27 (13.5)
Primary school	67 (64.4)	68 (70.8)	135 (67.5)
Secondary school	30 (28.8)	5 (5.2)	35 (17.5)
High education	2 (2.0)	0 (0.0)	2 (1.0)
Others	1 (1.0)	0 (0.0)	1 (0.5)
total	104 (100.0)	96 (100.0)	200 (100.0)
Occupation			
Workers	51(50.0)	2(2.1)	53(26.8)
Farmers	44(43.1)	93(96.9)	137(69.2)
Bussiness	7(6.9)	1(1.0)	8(4.0)
Total	102(100.0)	96(100.0)	198 (100.0)
Self reported nnual income in (Tshs)			
<10,000	4 (3.8)	28 (29.2)	32 (16.0)
20,000-50,000	13 (12.5)	43 (44.8)	56 (28.0)
>50,000	87 (83.7)	25 (26.0)	112 (56.0)
Total	104 (100.0)	96 (100.0)	200 (100.0)

*12 respondents didn't report their education level, 2 of them from CHF members and 10 respondents from non CHF members, the same as in their annual incomes.
*14 respondents didn't report their occupation status, 4 of them from CHF members and 10 from non CHF members.

From 212 respondents, were asked about their annual income according to the main source of income, 65.7% were found to be farmers, 7.5% were involved in business, 25.8% were employees and 0.9% had other occupation. From those who reported farming as a main source of income, 25% had less than Tshs.10000/= income per year, 40% had between Tshs.20000/= and Tshs.50000/= per year and 35% had more than Tshs. 50000/= Per year.

From those who were involved in business, 6.2% reported to have less than Tshs. 10000/= income per year, 18.8% had between Tshs. 20000 and 50000 income per year and 75% had more than Tshs, 50000 income per year. Those respondents who declared an employment as the main source of income, all had more than Tshs.50000 income per year.

Table 3.3 **Self reported annual income in Tshs. According to main source of income in Tshs**

Source of income	<10,000		20,000-50,000		>50,000		Total	
	N.	%	N	%	N	%	N	%
Farmers	35	(25.0)	56	(40.0)	48	(35.0)	139	(65.7)
Business	1	(6.3)	3	(18.8)	12	(75.0)	16	(7.5)
Employment	0	(0.0)	0	(0.0)	55	(100)	55	(25.8)
Others	0	(0.0)	0	(0.0)	2	(100)	2	(0.9)
Total	36	(16.9)	59	(27.7)	118	(55.4)	212	(100.0)

4.1.2 Accessibility to health services

About 78% of the respondents had access to dispensary and 20.1% to health centers, within the distance of less than two kilometers. While 25.6% of the respondents, got that service within a distance of two to five kilometers. Table 3.4 below shows the distance to the nearest health facility.

Table 3.4 Distance to the nearest health facility by type of health facility

Distance from health facility	Nearby dispensary	Nearby health center	Nearby hospital	Nearby traditional healer	TOTAL
	n %	n %	n %	n %	n %
0-2km	116 (77.9)	30 (20.1)	0 (0.0)	3 (2.0)	149 70.6)
3-5km	19 (82.3)	34 (63.0)	1 (1.9)	0 0.0	54 (25.6)
6-10km	6 (75.0)	2 (25.0)	0 0.0	0 0.0	8 (3.8)
Total	141 (66.8)	66 (31.3)	1 (0.5)	3 (1.4)	211

*One respondent didn't report the distance from his home to the nearest health facility.

4.1.3 Awareness about CHF

Out of 212, respondents 203 (95.8%) were aware of CHF while 9 (4.2%) not aware. A total of 153 (75.4%) male and 50 (24.6%) female respondents were aware of CHF. More male heads of households were aware of CHF than females.

As shown in table 3.5 the source of information on community health fund was identified as village meeting in 70.0% of all cases, while 22.2% from health facility and the least source of information to the households was newspapers which was reported by 1.0%.

Table 3.5. Awareness of CHF according to sex of respondents

Source of information	Male		Female		Total	
	N	%	N	%	N	%
Village meeting	115	(75.2)	27	(54.0)	142	(70.0)
Radio	9	(5.9)	5	(10.0)	14	(6.0)
Newspapers	1	(0.6)	1	(2.0)	2	(1.8)
Health facility	28	(18.3)	17	(34.0)	45	(22.2)
Total	53	(100.0)	50	(100.0)	203	

*9 respondents were not aware of CHF

About 75.2% and 54% of the male and female respondents respectively reported that they have got the information about the existence of the CHF through village meetings. In the other hand, more females got the information from health facilities 34.0% compared to males 18.3%.

MEDICAL LIBRARY * MWANZA

4.1.4 CHF membership at the household level

When compared CHF membership to the distance from each health facility table 3.6 shows that there was a tendency of CHF members to be living closer to a health facility, ($p<0.05$). Table 3.6 shows that, 79.8% CHF members lived not more than 2 kilometers from a health facility. 18.3% were from between 2-5 kilometers, and 1.9% were from more than 10 kilometres.

Table 3.6. Comparison of CHF membership to distance from health facility

Distance	CHF members		Non CHF member		Total	
	N	%	N	%	N	%
0 – 2	83	(79.8)	59	(62.1)	142	(71.4)
2-5	19	(18.3)	30	(31.6)	49	(24.6)
5-10	2	(1.9)	6	(6.3)	8	(4.0)
Total	104	(100.0)	95	(100.)	199	(100.0)

P value=0.0171

*Distances from health facility for 13 respondents was not reported.

4.1.4 CHF enrollment pattern in the 1998-2001 period and currently among households that were aware of CHF

Respondents who were aware of CHF (n = 203) were further asked whether their households had been and continued to be CHF members since its inception in 1998.

About 53.8% (45.3% +8.5%) out of 212 respondents reported that their households had been members since 1998. From table 3.7 below, 45.3% of the respondents were still members of CHF since they enrolled in 1998, while 8.5% (18) had dropped out of the CHF. About 40% reported to have not enrolled since its inception. However, 4.7% of the respondents were members who joined the CHF between1998 and June 2001. In total, 50% of the respondents were current members of CHF.

Table 3.7. CHF households pattern in the past 1998-2001 and current

CHF membership pattern	**No of households**	
	N	**%**
Enrolled before this research, still CHF members	96	(45.3)
Enrolled before this research, currently non-CHF members	18	(8.5)
Not enrolled in 1998, currently CHF members	10	(4.7)
Not enrolled in 1998, currently not CHF members	84	(39.6)
Total	**212**	

4.2. Perception on CHF

4.2.1 Awareness of benefits of CHF

Respondents who were aware of CHF 203 (95.8%) were further asked about the perceived benefit(s) of CHF scheme. The responses on CHF perceived benefits were recorded according to the CHF membership pattern as shown in table 3.8. About 56.6% of respondents reported increased accessibility to health services as the benefit of CHF. Drug availability and reduced cost were cited as benefits by 54.2% and 51.4% of the households respectively.

Table 3.8: Perceived benefits of CHF among households that were aware of CHF

Perceived benefits	CHF members N=106		Non CHF Member N=106		Total N=212	
	N	%	N	%	N	%
Increased access to health care	72	(67.9)	48	(42.3)	120	(56.6)
Reduced cost	64	(60.4)	45	(42.4)	109	(51.4)
Better staff attitude	58	(54.7)	40	(37.7)	98	(46.2)
Drug more available	62	(58.5)	53	(50.0)	115	(542)
Laboratory services available	8	(7.5)	3	(2.8)	12	(5.7)

NB: Multiple responses. Arespondent could give more than one reason, hence the total responses given were more than 212

4.2.2 Reported problems with community health fund (CHF)

A total of 203 respondents who were aware of CHF, were further asked about problem(s) regarding the CHF scheme. The responses on reported CHF problems according to the CHF membership are shown on table 3.9.

Table 3.9. Experienced problems towards CHF scheme

Experienced problems	**CHF members N=106**		**Non CHF Member N=106**		Total N=212	
	N	**%**	**N**	**%**	**N**	**%**
Lack of laboratory services	35	(33.0)	33	(31.1)	68	(32.1)
Poor staff attitude	23	(21.7)	12	(11.3)	35	(16.5)
Lack of drugs	23	(21.7)	18	(16.9)	41	(19.3)
Managements and administration Problem	21	(19.8)	15	(14.1)	36	(16.9)
No money to pay	10	(9.4)	25	(23.6)	35	(16.5)

* Multiple responses

Lack of laboratory services was cited as the main CHF problem by 32% of all respondents, followed by lack of drugs 19.3%. Management and administration problem, poor staff attitude and lack of money were reported by 16.9%, 16.5% and 16.5% of the respondents, that were aware of CHF as problems towards CHF, respectively.

4.2.3 Willingness and financial ability to maintain CHF membership.

Respondents were asked about the willingness to maintain their CHF membership for those who have already enrolled. The responses are shown in table 3.10 in frequencies.

Table 3.10: Willingness to maintain CHF membership

N=106

Willing	No households	%
YES	100	97.1
NO	3	2.9

3 respondents did not report at any side.

In terms of willingness to maintain CHF membership, 97.1% of the households reported to be willing to maintain their CHF membership regardless of their financial ability. Another 2.9% of the respondents were however not willing to maintain their CHF membership. When asked why they were not willing to maintain their CHF membership, all respondents reported three main reasons: the financial constraints, poor health staff attitude and vagueness of CHF procedures as reasons for not being willing to maintain their membership,(table not shown). The responses can be more than one answer for one respondent.

4.2.4 Willingness and financial ability to enroll as CHF members

The willingness and financial ability of CHF non members households to enroll as CHF member was combined as shown on table 3.11.

About 81% of the respondents reported to be willing to enroll as CHF members. While 18.6% of the respondents were not willing to enroll as CHF members. 80.5% of the households said that they were willing and financially able to enroll as CHF members. 19.5% were financially able, but there were not willing to enroll as CHF members.

Table 3.11: Willingness and financial ability to enroll as CHF household members among non-members household that were aware of CHF (N=97)

	Financially-able		**Financially not able**		Total	
	N	**%**	**N**	**%**	N	%
Willing to enroll	62	(80.5)	17	(85.0)	79	(81.4)
Not willing to enroll	15	(19.5)	3	(15.0)	18	(18.6)
Total	**77**	**(100)**	**20**	**(100)**	**97**	**(100)**

Respondents who are not willing to enroll their households as CHF members were further asked the reason for not willing to join CHF. 63.0% of all respondents, cited financial constraints as the crucial reason. Lack of drugs was reported by 43.2% of respondents and lack of laboratory services by 37.9% of them. While, poor staff

attitude, CHF procedures not clear, no physical examination was reported by 32.5%, 31.3% and 30.2% of the respondents, respectively. Table 3.12 summarizes the reasons for not enrolling as CHF members.

Table 3.12: Reason given by households for not enrolling as CHF members (n = 106)

Reasons	No of households	
	N	(%)
Financial constraints	58	(63.0)
Far from health facility	6	(7.7)
Lack of laboratory services	33	(37.9)
No physical examination	26	(30.2)
Poor staff attitude	27	(32.5)
Lack f drugs	38	(43.2)
CHF procedure not clear	27	(31.3)

*Multiple responses

4.2.5 Illness episode at the households members

Respondents were asked if they had any member of their household who fell sick in the last one year prior to the interview, and that person's age. A total of 172 illness episodes were reported from among 212 households during the past one year. Among the illness episodes, 45.3% were males while 54.7% were females. As shown in table 3.13 below, the highest proportion of illness episodes were reported in the age group above 40



(23.3%) followed by age group 0-5 by 20.3%. The sex and age distribution of the reported household illness episodes is shown in table 3.13.

Table 3.13: Distribution of the reported illness episodes by age and sex of households members during the past year

(n=172)

Age groups in years	Male		Female		Total	
	N	%	N	%	N	%
0 – 5	19	(24.3)	16	(17.0)	35	(20.3)
6 – 10	8	(10.3)	12	(12.8)	20	(11.6)
11 – 20	12	(15.4)	10	(10.6)	22	(12.8)
21 – 30	19	(24.4)	7	(7.4)	26	(15.1)
31 – 40	5	(6.4)	24	(25.5)	29	(16.9)
40>	15	(19.2)	25	(26.6)	40	(23.3)
Total	**78**	**(100.0)**	**94**	**(100.0)**	**172**	**(100)**

The reporting of illness episode was further compared by CHF membership status of the respondent. Among those who were reported to have had illness episodes, 88.7% were CHF members and 67% were non CHF members. There was no significant difference in reporting of sickness episodes between current CHF members and non-members as show on table 3.14. ($p = 0.31$).

Table 3.14: Reporting of sickness episodes in the past one year for CHF members and non members

CHF membership pattern	Reported sickness				Total	
	Yes		**No**			
	N	**%**	**N**	**%**	**N**	**%**
Current CHF members	94	(88.7)	12	(11.3)	106	(100)
CHF non-members	71	(67.0)	35	(33.0)	106	(100)
Total	165	(77.8)	47	(22.1)	212	(100)

P value = 0.31

Respondents were asked to report where care was sought for the episode. The first place for seeking treatment was reported to be in public health facilities by 94.6% of all households, 35.8% reported private health facilities, 8.8% and 3.0% of households has first chose traditional healers and self treatment respectively. Table 3.15 summarizes first choice of seeking treatment.

Table 3.15. Place of seeking treatment according to the order of choice

Choice of health care	Yes		No	
	N	%	N	%
Traditional healers	12	(8.8)	125	(91.2)
Public health facility	171	(94.6)	10	(5.4)
Private health facility	48	(35.8)	86	(64.2)
Self treatment	4	(3.0)	128	(97.0)

NB: Multiple responses

4.2.6 Satisfaction with health care

From 165 CHF and non CHF members who had reported illness episode and attended any health facility, 85.3% were satisfied with the services provided. About 14.7% of the respondents were not satisfied.(Table is not shown here). Reasons for being satisfied were availability of drugs, by 54.7% of respondents. Patient recovery and good reception were reported by 54.2% and 52.8% respectively.(Table 3.16).

Table 3.16: Reasons for being satisfied with public health care according to CHF members.

Reasons	CHF members (n=106)		Non-CHF members (n=106)		Total N=212	
	N	%	N	%	N	%
Enough drugs	62	(58.5)	54	(50.9)	116	(54.7)
Laboratory services	45	(42.5)	39	(36.8)	84	(39.6)
Good reception	61	(57.5)	51	(48.1)	112	(52.8)
Patient recovery	64	(60.4)	51	(48.1)	115	(54.2)
Short waiting time	59	(55.7)	48	(45.3)	107	(50.5)

P value = 0.614

*Multiple responses of the reasons

The reasons for not being satisfied with treatment were given as: Lack of laboratory services 72.2% of the cases; poor reception in 58.8% of the cases, lack of drugs 55.6% of the cases. (Table 3.17.)

Table 3.17: Reasons for not being satisfied with treatment given

Reasons	No of respondents (N=18)			
	YES		NO	
	N	%	N	%
Lack of drugs	10	(55.6)	8	(44.4)
Lack of laboratory services	13	(72.2)	5	(27.8)
Poor reception	11	(58.8)	7	(41.2)
Long waiting time	9	(50.0)	9	(50.0)
Not being listened	10	(55.6)	8	(44.4)

*The responses could be more than one`

5.0 FOCUS GROUP DISCUSSION RESULTS

One Focus group Discusion was conducted to health providers and in-depth inetrviews to CHF managements by using a semi-structured interview guideline. The discusions were noted in a notebook by principal investigator in Swahili, and then later translated in English.

5.1 Health Providers Expectations of CHF

Participants identified a wide range of expectations they had regarding CHF. These reflect health providers' description of the benefits that they expected to receive after iniciation of CHF that would motivate them to provide better services. They were asked about what they thought was the most important thing that would make them satisfied with introduction of CHF scheme.

Most discussants expressed their feelings that they expected their salaries and other monetary benefits to rise During the CHF compain, health workers were told that, after inception of CHF essential benefits will be provided to health workers.

One nurse had this to say;

"...We expected CHF to raise salaries of the staffs. The salary is not enough even for basic things like buying food, kerosene and other things, which are daily needed at home, apart from clothes, shoes or to pay school fees for our children...".

However, discussants revealed that this expectation was not reached.

MEDICAL LIBRARY * MUHAS * DAR ES SALAAM

Participants often pointed out that the level of quality of services provided at their health facilities to be poor. Participants reported that, medicines were often unavailable in their health facilities during the second half of each month.

Providers reported that, consumers and other people accused them for selling drugs to private health facilities, hence creating a shortage at public health facilities.

Reflecting a common concern, one nurse voiced a desire for a more steady supply of medicines at her health facility, to avoid misunderstanding with community...

"...Well equipped health facilities, steady drug supply will enable us (health providers) to work comfortably, hence provide good health quality..." argued one nurse aged 35.

In many health facilities, understaffing is still a chronic problem. Before the CHF introduction health wokers were overloaded with work. Most of them expected that, after the introduction of CHF, the number of staffs will increase and their workload will be reduced.

When asked about the workload in their health facilities for the last three years since CHF was introduced, a discussant aged 28 responded as follows:

".... In fact nowdays we do not have many clients since the introduction of CHF.... no unnecessary attendances here in the dispensary. People know that, if they come, they have to pay especially for those non-CHF members who are the majority here in the community. They come when really they are in need with health services. "Thus, work load had slightened, but it varies according to the season....". Reported one Nurse Assistant.

From the explanation above, it was seen that after CHF implementation, the workload of staffs was reduced not because of increased number of staffs, but lower number of patients visiting health facility.

Many health facilities was not in a good state. Most of them require rehabilitation.

"...Our dispensary looks like ruins. The place is not attractive at all. The waiting room for patients is not conducive, benches are very old. The house needs rehabilitation as it has cracks and the floor is demolished..." Urged one Clinical officer. The universal expectations from the participants were that, the health facilities should be clean and in a good look.

Further training of the health staff was also pointed out from the focus group as one of the expected CHF benefits.

"I am a N/A for years, I can't go for further training because, I have no money to pay for fee. We were told that, after introduction of CHF, training and upgrading of staffs will be conducted as well as to recruit more new staffs . Now I am waiting for it."- One Nurse Assistant complained.

One Rural Medical Aide (RMA) had a similar opinion. "Training is very important, things are changing very fast year by year..... To day's technology is not like five years ago. So we need training as part of motivation and recruiting more staff to overcome the present shortage." She said.

However, training of health workers and upgrading of lower cadres, was one of the government's strategies which aimed at phasing out cadres like maternal and child health aides, (MCHAs) and Rural medical aides, (RMAs) to be Public health nurse B(PHNB) and Clinical officers(Cos) respectively.

One health assistance had this to say about team working: "....District health management team meet frequently to discuss health matters in the district, but they do not invite representatives from the health facilities ....". The communication between health providers and the management cadres seems to be of low level.

When asked, what were the problems experienced during the introduction of CHF, focus group participants expressed their dissatisfaction with a number of issues.

One clinical officer stated, "..... CHF has a very complicated and bureaucratic procedure on utilizing the funds. Since its implementation in 1998 up to now, the funds are not yet utilized. Only once we received drugs bought from that funds. People were complaining that, there were no changes in health service provision despite of their CHF contributions...".

Another nurse commented as follows "....Patients usually are told to buy kerosene for sterilization of instruments of the health facility, regardless whether he/she is a CHF member or not....".

One clinical officer had this to say:

Iam in charge of this health facility. I am collecting money from user fees and from CHF contribution. When it comes for me to submit them to the CHF headquarter, I use my

out of pocket money for the bus fare. The CHF scheme did not offer allowance for that matter..."

Lack of feedback also was pointed as another problem, which faced health providers. "...We don't know how much we have in our account (health facility account) from user fees and CHF contribution...." Said one health worker aged 37.

During the CHF promotion campaigns, a package of benefits was promised to the health workers. Three years after CHF implementation prior to the study, it was seen that, those promises were not fulfilled. It is possible that, this may adversely affect the health care provision. As a result, consumers would be discouraged to seek health services from them. On the other hand, the rate of enrollment in CHF would be at a low level or no at all. Hence, sustainability of CHF, would be threatened.

5.2 In depth interviews to management of CHF

One CHF management officer aged 40 years, when asked about the functioning of the CHF in the district, explained that: "...Ward CHF committees were formed and given the task of managing the CHF scheme in their respective wards. The ward health committee (WHC) was responsible for producing ward health plan, which was later approved by council health board.

The CHF membership unit is the household. The number of members depends on populations in term of households. Each household contributes Tshs 5000/ Per annum. The total contribution is limited to the member of household members. The user fees collected are supervised closely in health centers and dispensaries as part of CHF design.

One money collector who is also the in-charges of health facilities in rural areas also said that, "... the user fees are collected together with CHF contributions from wards and submitted to the district council accountant for banking. The DMO, who is a secretary of District health board (DHB), receives bank statements from district accountant as information (feedback) regarding the balance that exist in the CHF. Then, DMO gives feedback to the in charges of health facilities.....".

Another interviewee was , asked about the financial aspects of the CHF functioning. He had this to say: "... utilization of CHF is not yet started...".

When asked why the funds are not utilized since the implementation of CHF . He had this to say:

"... We are still training staffs on CHF guidelines; on how to manage the funds and how to grant exemptions".

As seen in the interview, the CHF scheme in Iramba district was not yet full functioning despite the revenue collection. The funds collected from CHF members, were still kept in the bank. Quality of health care not yet improved, so consumers' perceptions of good quality health care are not met. Hence, sustainability of CHF is questionable.

6.0. DISCUSSION

This study shows that, three years after CHF implementation in Iramba district, there were some problems related to enrollment and health services provision. They include: low households enrollment in CHF, increasing dropout members, not enough about CHF awareness, and lack of trust from the community to the CHF.

The finding from the study seems to compliment other previous studies conducted in Igunga district, (Robles, 1999; Ongwae, 2000) highlighting the magnitude of different factors contributing to the enrollment of households in CHF, which are easy accessibility of health services, reduction in cost and drug availability.

Study findings show that 95.8% of the respondents interviewed were aware of CHF. Village meetings and health facilities were identified as the main source of information which accounted for 70% and 22.2% respectively. Radio and newspapers accounted for 6% and 1.8% of the source of information respectively. Regardless to the high awareness of CHF among the population, still the recruitment rate was low and the dropout rate was high.

It shows that , availability of drugs and the quality of health services were the factors for people's trust to CHF. The trust of community towards CHF was the main reason for its sustainability.

MUHIMBILI NATIONAL HOSPITAL LIBRARY

The findings on source of information, show that, mass media had not been explored as possible strategy for raising awareness about CHF in the communities. The findings show that female had got more information from health facilities than from others sources. The studies conducted in Igunga revealed the low magnitude of awareness about CHF among the households 55.6% (Kapinga and Kiwara, 1999), (Ongwae, 200).

Overall CHF membership in Iramba district has been decreasing since its inception in 1998. According to the district-based source, the household's enrollment had been decreasing year by year. A total of households 2788 (4.9%), 2580 (4.6%) and 1382 (2.4%) by the year 1998, 1999 and 2000 had enrolled in CHF respectively (DMO, 2000). According to the study findings, the current (2001) CHF enrollment was found to be 4.7% of the respondents. The district estimate is based on memberships recruitment data as the numerator and the total member of households of 56.487 as the denominator. But the projection of 1998, show the number of households was estimated to be 69,521. Therefore, use of 56,487 as the total number of households in the district most likely it may lead to overestimation of CHF enrollment

Other findings in relation to memberships include a CHF continuing rate of 45.3% and a drop out rate of 8.5% in the period 1998-2001. Most of the current CHF members have also been members before. There was a minimum recruitment of the new members And some of the members who enrolled at the beginning did not want to continue with their membership. Similar studies conducted in Igunga, showed that, recruiting of new

members is low comparing to members who enrolled at the beginning (Kapinga and Kiwara, 1999), (Ongwae, 2000).

Further assessment was done on the association between a few selected household characteristics and CHF membership. Study findings based on self-reported income, showed that, household income might not have been a reason for determinanation of CHF membership in Iramba district. Considering that, households were expected to prepay Tshs. 5,000 per year for CHF membership relative to a mean annual self-reported income of Tshs. 30,000/= per households. However, this finding contrasted the results found in the studies conducted in Igunga.

In Iramba district, there was no financial problem for paying the CHF enrollment fees. But the district residents were not sure that if they pay ,there will be no other extra costs for health services during the year of membership. (for example to buy kerosene, drugs and other items).

Specific benefits expected by CHF members included easy accessibility of health care services, reduced costs and drug availability. In general provision of good health services was also cited. By design, CHF members were expected to benefit from free access to health care without to pay at each visit to the health facilities. The low annual premium of Tshs. 5,000/= was expected to cover all the cost reduction as a benefit as compared to Tshs. 1000/= for each health facility visit for the non-exempted CHF non-members. But currently, CHF members were facing some problems as discussed before.

On the other hand, Lack of laboratory services and lack of drugs were perceived by CHF members as problems with CHF. However, management, and administration problems and financial constraints were not highly ranked.

From the side of health providers, irregular supervisions and unsteady supply of medical equipments and drugs were the perceived problems with CHF. According to the study, it appears that, the majority of the health staff were not providing the quality health service because of lack of essential equipments in their health facilities. Other expectations of the health providers were: opportunity for upgrading, higher salaries, less workload, better working environments and more drugs supply.

The study has shown that, among households that were CHF members, 97.1% had reported to be willing to maintain their CHF membership. The respondents who were not wiling to maintain their CHF membership reported financial constraints, poor health staff attitude and vagueness of CHF procedures as reasons for not willing to maintain their CHF membership. The finding therefore suggested absence of moral hazard. Moral hazards has been documented as being a potential threat to community based risk-sharing scheme (Ilomo, 1999: Musau, 1999). But evidence from the study indicates that in Iramba district there was no moral hazards.

In Iramba district, the study finding indicated that public health facilities ranked first in the choice of place for seeking treatment, while the private health facilities ranked

second. A possible explanation could be the fact that most study households 77.9% had a nearby dispensary and hardly any other choice. For both CHF and non-CHF members the reason for choosing a place to get treatment included; availability of drugs and good reception. The citing of quality factors like availability of drugs showed that, the benefits of CHF were appreciated irrespectively of CHF membership.

Another study on the choice of health providers has been done by Asenso-Okyere et al.(1998) in Ghana, where he found about 66%, 69% and 59% of children ,adult males and females respectively, use self medication as their first choice of treatment. About 10% of households have sought treatment with traditional healers. The reasons for their first choices of health provider were cited as availability of drugs and quality of care.

The findings of this study show three major groups of factors that enhance the existence of CHF. These groups are related to the consumers, the providers and the management of CHF. Knowledge, trust of the population to CHF and number of members enrolled in, were found to be the most important factors to the consumers side. Provision of enough and right information about CHF and the modern medicine in general, assumed to be a mechanism of sustaining CHF.

The knowledge takes part in building a trust in CHF. Some of the non member households declare a low trust in CHF. This reflects that the functioning of CHF is still low, or may be they were alert from previous experiences of any household

contributions to different governments institutions, whereas, the impacts were almost nothing to them from their expectations.

From the health providers side, the important factors for enhancing CHF were good professional attitude and commitment. In the study, some of the households mentioned that, a number of health workers did not listen to the patients. In some cases health providers have poor reception to patients.

These reasons were mentioned as factors for not joining or withdraw from CHF.

Factors from the side of the management that were assumed to enhance CHF were related to consumers and providers. These are managerial skills, and organizational skills. A well organized mobilization campaign to the communities is an essential factor to enhance CHF. To create knowledge to the people by sensitization, mobilization, trainings and a regular supervision to health providers was seen in this study as a way to sustain health services under CHF scheme. According to the study, it shows that, the management of CHF in Iramba district has not yet organized for take-off.

7.0 CONCLUSION

1. Accessibility of public health services in Iramba district, after three years of its implementation is concluded to be high, while health care provision still in a low quality.
2. The CHF scheme in Iramba district was partially functioning.
3. The recruitment rate is low and the dropout rate is increasing.
4. Sustainability of health services under CHF scheme, may be questionable if the delays to start functioning in full will be prolonged.

8.0 RECOMMENDATIONS

1. In order to increase the number of members, a sustained CHF promotion campaign strategy is recommended..
2. Close monitoring and supervision for CHF collections is recommended as an approach for holding cash collectors and health providers more accountable for their work.
3. Strengthening reliable and committed participation from the respective committees and communities is recommended in order to increase ownership of the communities towards CHF.
4. Recommended that, no extra charges of health services to those who are CHF members (for example to buying kerosene, drugs or other items).

REFERENCES

Abel-Smith B (1986) Health insurance in developing countries; Health policy and planning 7, 215-226.

Abel-Smith B. and Rawal P (1992) Can the poor afford FREE health services? A case study of Tanzania. Health policy and planning 7, 329-341.

Arthin D. (1994) The health card insurance scheme in Burundi: a social asset or a non-viable venture. Soc.Sc.Med., vol.39(6): 861-870.

Arthin D. C (1995) Health insurance in Africa. Lancet 345, 44-45.

Atim C. (1999) Social movements and health insurance: a critical evaluation of voluntary non-profit insurance scheme with case studies from Ghana and Cameroon. Soc.Sci. Med. 1999,vol 48(7) 881-896.

Asenso-Okyere WK and Adukonu A (1998) Cost recovery in Ghana: Are there any changes in health care seeking behaviour? Health policy and planning 13 (2), 181-188.

Bloom G and Shenglan T. (1999) Rural health prepayment schemes in Ghana towards a more active role for government. Soc. Sci.Med. 48:951-960.

Baum F (1995) Research in public health: Behind the qualitative- quantitative methodological debate, Soc. Sci. Med 40(4), 459-468.

Berman P (1996) Health sector reform: a world wide perspective. Current Issue in public health, 2: 34-38.

Bradley F(1999): Health economics: Elementary economic evaluation in health care, British Medical Journal 1997: 314: 1916-1917.

Chernikovsk D and Meesok AO (1986), Utilization of health services in Indonesia. Soc. Sci. Med 23, 611.

Cassels A. (1995) Health sector reform: Key Issue in less developed countries, Journal of International development, and 7(3): 329-347.

Collins D, Quick JD, Musau SN, Kraushar D, Hussein IM: The fall and rise of cost sharing in Kenya, impact of phased implementation; Health policy and planning, 1999 vol. 11(1): 52-63.

Creese A and Bennett S. "Rural risk sharing strategies in health". A paper presented to an international conference sponsored by the World Bank, innovation in health care financing, March 10-11 1997, Washington DC.

Community health fund (District health plan) model, MOH, 1999.

Department of health (DOH/ GTZ) "Community health fund". A resource book of HAMIS winners in the Philippins, 1996.

Gembe CJ."Utilization of the district hospital after introduction of cost sharing." Scientific conference of the Tanzanian Public Health Association, Nov ,11-15, 1996, pg 132-135.

Gilson L, Russell S. and Buse K. "The tropical economy of user fees with targeting equitable health financing policy? Journal of International development, 1995 Vol. 7(3): 369-401.

Fromer M, Text book in Community health Care (1983), 268.

GTZ. "SUPPORT for health sector reform in Tanzania". 1997.

Hussein AK and Mujinja PG "Impact of user charges on government health facilities in Tanzania" East Afr. Med. J., 1997.

MEDICAL LIBRARY DAR ES SALAAM

Hussein AK. "The effect of user charge policy and other price factors on the utilization of health services in Dar es salaam region." M. Med Thesis, 1994, Muhimbili University College of health Sciences.

Ilomo P "community health fund and health national insurance in Tanzania". 1999. (unpublished).

Kapinga AM and Kiwara AD. "Quantitative evaluation of community health fund in Igunga (including Singida rural district). Health and Nutrition project component 1, MOH, 1999.

Kawalewski M, Mujinja PGM, Albrecht J, Kitundu H, "How much does maternal health cost? User cost of free maternity services in peripheral Tanzania. Forthcoming in African Journal of reproductive health.

Korte R, Richter H, Merke F and Gorgen H. "Financing health services in Sub Saharan Africa:Soc. Sci . Med,1992,34(1): 1-9.

Liverck JI and Bordart C. "Quality of health care equals improved access: Field experiment in Camroon. Soc. Sci. Med , 1993. Vol 37(3) 369-383.

Mnyika KS, Semali IAJ, Kwesigabo G, Kilewo JZJ and Kapinga SH. " Lecture notes in Epidemiology and Research Methodology." MUCHS, IPH,1998.

MOH. "Proposals for health sector reforms ." Report of the working group, United Republic of Tanzaina, 1994.

MOH. "Community health fund :OPERATIONS guidelines". Tanzania 1999.

MOH," Community health fund: design". Tanzania 1999.

MOH, "Development of indicators of monitoring and evaluation of CHF in Iramba district, Tanzania,1999.

Mwabu G, Mwanzia J. and Liambilia W."User charges in government health facilities in Kenya: effect on attendance and revenue". Health policy and planning , 1995 vol. 10 (2):164-170.

Mwanza EM ." Structural adjustment programms inSADC, experiences and lessons from Malawi, Zambia and Zimbabwe," 1992.

Makwaya CK, Moshiro K, Mpembeni RC and Kazaura MR. "Lecture notes on Biostatistics". MUCHS, IPH, (1997).

Milio, (1997) "Measurement tools for a community health improvement process".

Njau FN and Shirima RM, "how will the poor fair in the CHF program," Is equity being abandoned." Technical paper No. 2 on CHF pre test. MOH, Rep. Tanzania 1999.

Robles A, Chuwa V, Mkini A, Mwinyi M, Urrio T, Mushi Sadallah S. "Qualitative evaluation of Community health fund (CHF) Igunga district, Health and Nutrition Project component 1, MOH, 1999.

Stock R. (1983) Distance and utilization of health services in rural Nigeria. Soc Sci.Med. 17 (9), 563-570.

Toonen J. "Community financing for health care: a case study from Bolivia". Royal Tropical Institute, Amsterdam, 1995, 80p. Bulletin337.

Walter, (1995). Public health and human services, version (1-24-00).