FACTORS AFFECTING ENROLLMENT INTO THE COMMUNITY HEALTH FUND IN MAGU DISTRICT

Heri Marwa

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FACTORS AFFECTING ENROLLMENT INTO THE COMMUNITY HEALTH FUND IN MAGU DISTRICT

BY

Heri A. Marwa (MD, DGH)

A dissertation submitted in partial fulfillment for the requirements of the award of masters of arts degree in health policy and management of the Muhimbili University of Health and Allied Sciences

November, 2009

CERTIFICATION

The undersigned certifies that he has read and recommends for the acceptance by the Muhimbili University of Health and Allied Sciences (MUHAS) the dissertation entitled **"Factors affecting enrollment into the Community Health Fund in Magu district"** in partial fulfillment for the requirement of the award of Masters of Arts in Health Policy and Management degree.

SUPERVISOR'S SIGNATURE: _____

Prof. A. D Kiwara

Date; 29th Nov 2009

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DEDICATION

I dedicate this work to my kids Generose Maureen and Samwel Raphael Marwa. I love you and may almighty god show you the light so that you can live good life.

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LIST OF ABBREVIATIONS

CBHF – Community Based Health Fund

CHF – Community Health Fund

DGH – Diploma in Global Health

DRF – Drug Revolving Fund

FGD – Focus Group Discussion

MHO – Mutual Health organization

MOH – Ministry of Health

MUHAS – Muhimbili University of Health and Allied Sciences

NHIF – National Health Insurance Fund

PI – Principal Investigator

RA – Research Assistant

RSTGA – Rungwe Smallholders Tea Growers Association

TIKA – Tiba Kwa Kadi (Treatment using pre paid Card)

ABSTRACT

Following Health Sector Reforms, Tanzania put in place different strategies towards improvement of its deteriorating health sector. These strategies among others included introduction of a Community Health Fund (CHF). This fund was first piloted in Igunga District in 1996.

Despite predicted advantages of the CHF, the enrollment is not as high as expected and more than 10 years experience of the fund has not improved coverage. Different reasons have been pointed out as the causes of the failure of the policy. Magu District is also faced by the problem of low enrollment into CHF.

A descriptive cross sectional community based study, aimed to determine factors which affect enrollment into the Community Health Fund was conducted in Magu District. The objectives of the study were

i. To determine knowledge and attitudes towards community health fund benefits
ii. To assess community involvement in the CHF management
iii. To determine the communities preference on health service providers

The findings of the study show that majority of the population in Magu District are peasants and they prefer government health facilities as their primary health service provider. Despite these facts which are in favour of Community Health Fund, Magu suffer from very low enrollment (only 0.9% households are members) mainly due to the fact that majority of the population have not received proper information on Community Health Fund and the community involvement is therefore very poor.

The study recommends that the district council should improve collaboration between health workers and village leaders so that village leaders can be involved fully in awareness campaign, increases in community involvement in the management of CHF and to increase quality of service provided by government facilities.

CHAPTER ONE

1.1 Introduction and Background

After the Arusha Declaration in 1967, Tanzania's health policy aimed at achieving equitable access to health services. To attain this goal, the government adopted two approaches which were; provision of service with no out of pocket payments at health facilities and expansion of health services in rural areas where majority of the population (more than 90%) lived (1). This strategy led to the establishment of a broad network of health facilities, especially dispensaries and health centers. The strategy was successful to the extent that it was estimated that, by the year 1992, 70% of the population were living within 5 Kilometers from a health facility and 90% within a 10 Kilometers radius (2).

Following the world economic crisis of the 1980s, developing countries, including Tanzania adopted economic reforms as a prerequisite for receiving loans from Bretton Woods institutions. As part of economic reforms, Tanzania undertook health sector reforms starting in 1993. Under the health sector reform, Tanzania put in place several strategies towards the improvement of deteriorating health services. Among the strategies introduced were cost sharing in health services through user fees, introduction of community health fund (CHF), introduction of drug revolving fund (DRF), introduction of National Health Insurance Fund (NHIF) and re - enactment of private for profit health facilities (1).

The introduction of cost sharing in health services has been found to have negative effects on the utilization of health facilities in developing countries. In Tanzania, Kenya and Cameroon for example, studies reported the decline of utilization of more than 50% contributed by introduction of cost sharing (3, 4, and 5). Although transport costs is also a barrier to the health services utilization, the major effect of cost sharing was observed in Uganda where there was marked increases of attendance by 44% and 77% at lower level health facilities on the first and second year after abolition of user fees in 2001 (6). The introduction of cost

sharing not only has effects on payment for consultation and medicines but also on the resources which could have been used for transportation (3).

Health insurance mechanism seems as one way to facilitate health care access, whereby risk and financial inputs are pooled by the way of private contributions or from salaries and taxation (7). In developing countries, the majorities of people are either self employed or work in the informal sector. This makes expansion of formal health insurance difficult. In Tanzania, the National Health Insurance Fund (NHIF) which operates by deducting 3 percent of the of salaries of government employees (who are main members) faces difficulties because only 2.5 % of the populations are government or parastatal organizations employees (8). Taxation systems are also generally insufficiently developed and do not allow for adequate revenue collection to ensure universal coverage (7). Basically, community based health fund (CBHF) system can be seen as a step towards universal coverage in developing countries (9).

1.2 Community Health Fund

Community health financing has emerged in many developing countries after the economic crisis followed by health sector reforms. Community Health Fund (CHF) is a pre-payment scheme whereby community members' finance or co-finance costs associated with health care services. Although the operations of these funds vary, most of them are voluntary in nature and not for profit in its financial operations. Most of CHF are community based but there are few which are facilities based hence the names Community based schemes and Facility based schemes respectively. The main reasons for the establishment of CHF are usually for resource mobilization and increases financial accessibility to health facilities.

For Tanzania, CHF is a district-based, voluntary pre-payment scheme, complementing other financing mechanisms, with a view to improve access to health care services. It is a means of cost- sharing rather than being intended to cover its costs (10). CHF was introduced as a pilot scheme in Igunga district in 1996 as a means of complementing other financing mechanisms. This was followed by the expansion to 9 other district in 1998. The act to establish CHF

nationally was passed by the parliament in the year 2001. CHF is a means of cost sharing rather than being intended to cover health costs (11).

The act applies to local government authorities and its objectives are

i. To mobilize financial resources from the community for provision of health care services to its members
ii. To provide quality and affordable health care services through a sustainable financial mechanism
iii. To improve health care services management in the communities through decentralization by empowering the communities in making decision by contributing on matters affecting their health

With CHF, a member would be provided with a 'health card' which will allow access to preventive and curative health services from a selected health facility be it public, private for profit or private not for profit (12). As per guideline, the membership for CHF is voluntary and the health card is purchased at the price agreed in the community and there will be an option for installment payments for those with regular source of income. CHF was envisaged to reduce in large portion the problem of access to health care and improve health financing in Tanzania (12). It should be viewed as a precursor to National Social Health Insurance scheme and the important and continuing role of the Ministry of Finance in funding health services is still acknowledged (10)

CHF in Magu District

Magu District authority introduced CHF in Magu urban ward as a pilot scheme in 2003. By the end of 2003, only six households had been recruited. The number thereafter dropped to two households in 2007. Enrollment of CHF into other Magu District wards was done in 2007 by mass campaign, meetings and leaflets.

The membership fee for CHF is 10,000 Tsh /year per household and the fee covers all members of the household below the age of 18 years. Benefits included in the scheme are all services provided by government facilities including primary and secondary referral (to health centers and district hospital respectively). The fee is paid annually with no option for installment payments. Those who are not members of CHF are required to pay Tsh. 2,500/- Tsh. as user fee for each visit at government health facility. This means that CHF can be considered to be a good investment for families who expect to utilize health care services more than four times in a year.

The number of households enrolled in CHF has dropped from 360 households in December 2008 to 56 households (0.08% of all households) in March 2009 (13 and 14).

1.3 Problem Statement

The two types of uncertainty in health care that give rise to the development of insurance schemes are; first a consumer do not know if he/she will ever need health care and second, consumer do not know the full financial implications of illness (15). Community based health funds, since designed for people in informal sector are therefore expected to have enough clients in areas where informal sector dominates. In contrary, one of the major problems in most of the community based health fund in the places where implemented is the small number of members. About 50% of the 258 community based health funds studied have member less than 500 (16). This affects the viability of the fund as risk and financial pooling mechanism are minimal due to small groups of enrollees.

In most areas of Tanzania, enrollment in the community based health fund is not as high as expected. In Igunga, which was the first district to pilot CHF, only 4.9% of households were enrolled in the first year, and this coverage increased to only 5.9% in the following year. This is very low compared to the government expectations of 30% (17). In the first 7 months of enrollment in Singida Rural only 4.1% of households joined the CHF (17). In Hanang enrollment reached a peak of 23% of households in 1999 which was the second year of

implementation but the coverage dropped to 4% in the following year (18) while more recent data shows further decrease to 2.2% of households in 2003 (9).

Not all the districts have poor enrollment of members into the Community Health Fund. In a study done in Iramba district, 53% of interviewees were consistently members of CHF since its establishment in 1998 (19). Also, enrollment is high for those areas where there is special arrangement between farmers associations and CHF management to form a group membership. In Rungwe for example, Rungwe smallholders Tea growers association (RSTGA) and Wakulima Tea Company, in 2006 together they paid CHF premiums for 5000 households of their members, and are expecting to cover 15,000 households later on (9).

With this variation in enrollment of CHF members, it is important to understand factors that are perceived by the communities to affect their enrollment into the Community Health Funds.

1.4 Rationale

This is a community based study aiming to obtain information from actors themselves. The information obtained from this study will:

- Add knowledge on factors affecting enrollment on CHF as perceived by the community
- Help policy and decision makers to design appropriate and effective interventions to increase CHF enrollment

1.5 Objectives

The main objective of this study is to determine factors perceived by the communities to affect enrollment into the Community Health Fund in Magu district.

Specific Objectives

In order to achieve the above objective, the following specific objectives will be used by this study:

1. To determine knowledge and attitudes towards community health fund benefits
2. To assess community involvement in the CHF management
3. To determine the communities preference on health service providers

1.6 Research Questions

i. Why is there a low enrolment in CHF despite the advantages it has compared with out of pocket payment?

ii. What additional benefits do members of CHF receive compared to non members?

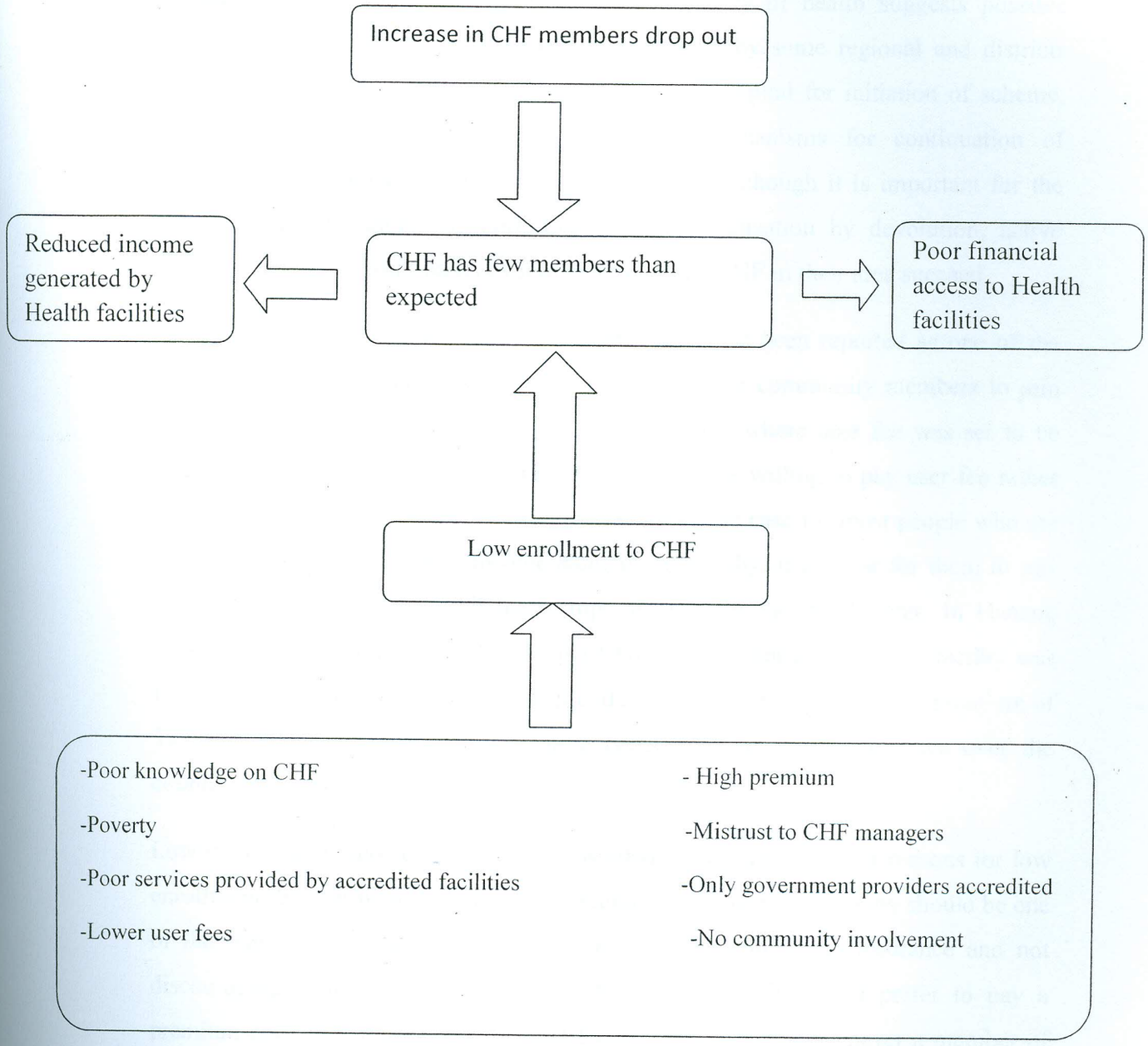
iii. Is the Magu community involved in CHF management and decision making?

iv. What is the most preferred health service provider in the community? Is it private or government, dispensary or drug stores? Modern or traditional?

v. How does the community finance their health services?

1.7 Conceptual Framework

The figure below shows factors suggested by other studies to affect enrollment into CHF and its impact.



CHAPTER TWO

2.1 Literature Review

Different studies and reports have suggested factors that affect enrollment in the community Health Fund at different levels. Ministry of health suggests possible factors at regional level to be lack of commitment by some regional and districts officials, inadequate follow up from MOH, lack of capital for initiation of scheme, lack of uniformity on premiums, inadequate mechanisms for continuation of membership and unclear referral mechanisms (20). Although it is important for the fund to receive regional support, but with decentralization by devolution, active district council can work on its own to make sure the CHF in their area succeed.

Low out - of - pocket user fees set in some areas has been reported as one of the reason for low enrollment as it gives no incentives for community members to join (17, 21). Mhina gives an example of Nzega District, where user fee was set to be 1,000 shilling per visit and hence many members were willing to pay user fee rather than higher CHF premiums (21). But this cannot be the case for most people who are farmers as they receive their income annually. Logically, it's better for them to pay CHF premium when they sell their crops at once for the whole year. In Hanang District, the average number of visits per CHF member household to the facility was found to be 32 (18). By simple arithmetic, this shows payment of a yearly premium of Tanzania Shillings 10,000 (15) is more beneficial than paying user fee over the counter.

Low income and income unreliability was cited by Msuya as further reasons for low enrollment (9). But with well informed community, income unreliability should be one of the reasons encouraging community members to join health insurance and not discouraging them. People with unreliable income ideally would prefer to pay a premium once in a year when they get their income, so that whenever a member of household suffers an illness can be treated at health facility even if he / she does not

have money at the time of seeking care. Mtei describes the fact that consumers do not know the full financial implications of illness, both in terms of treatment costs and lost earnings as second type of uncertainty which gives rise to the development of insurance schemes (9). However, Shaw also suggests that higher user fee would better represent true opportunity cost and motivate more households to join CHF (17). Since the CHF premium has to be decided by the members of the community themselves, with proper community involvement low income should not be an obstacle since the premium will be set at the amount agreed by the community that most can afford.

Some authors find that lack of information due to insufficient sensitization / education to the community (19, 21) has effect on the enrollment of CHF. This is contrary to what has been found in Hanang where knowledge of CHF programme was relatively high but the enrollment was still low (18). In Songea also, despite the fact that CHF and user fee knowledge were almost the same (94.9% and 93.2% respectively), most respondents (81.4%) used user fee in financing their health care consumption and it was also the most preferred health financing mechanism (38.4%) followed by CHF with 30.5% (22).

Mwendo also cited non coverage of referral as one of factors affecting enrollment of CHF membership (19). This can be purely an implementation problem as per the design, it requires the dispensary chosen to be linked to the first referral hospital (12). In other districts, the referral is covered by CHF but most non members and several CHF members were not aware that membership fees also cover referrals (18). This indicates that poor implementation and lack of community involvement in CHF management can have effect on CHF enrollment.

Another factor which has been cited to affect enrollment of CHF by Bonu et al is the perception of poor quality of care (9). It is well known that most public owned health facilities provide poor quality of care, characterized by inadequate human resources and lack of drugs and equipments. Quality of care might not have greater impact in the CHF enrollment if districts involve private for profit and mission facilities as service

providers for CHF members as suggested in the CHF design document (11). This can also create challenge for public health facilities in their quality of care.

Mhina is of the view that, the introduction of the National Health Insurance Fund (NHIF) which took the public servants out of the CHF as the reason for decline in enrollment of CHF (21). Although it is clear that NHIF (which is mandatory for public servants to join) is a challenge for CHF due to large number of civil servants living in districts where CHF implemented, but Nzega where Mhina did his research did not manage to reach the expected enrollment of 30% (17) even before introduction of NHIF. In Hanang the CHF enrollment fell from 23% in 1999 to 4% in 2000, two years before NHIF enrollment started (18). These significant changes cannot be explained by introduction of NHIF. The challenge posed to CHF by the introduction of NHIF however, is worth mentioning because for instance by 2001 in Kilosa district, 48% of the renewing members in the CHF were government employees (24). NHIF being a mandatory scheme for civil servants, CHF has to develop strategies to increase enrollment from non government employees and those in the informal sector.

Community involvement in the management of any project creates the sense of ownership in the community. The CHF schemes are supposed to be a potential means of empowering communities in health care decisions and promoting cost sharing with strong local participation (12). This is different from what was found in Hanang where most CHF members in the ward visited had never been invited to or attended a meeting of CHF members and did not know how CHF was managed (18). Failure to disclose the expenditure of locally raised CHF funds raises doubt among the community and creates loss of community confidence to the ward and district CHF managers. In his study Kamuzora quotes one respondent at a focus group discussion (FGD) who identified lack of accountability as a problem; "with regards to financial matters, we do not know what is happening. No financial report has ever been given to us" (25).

CHAPTER THREE

3.1 Methodology

3.2 Description of the study area

Magu District is one of 8 districts of Mwanza Region. The district council started to operate in 1974. Administratively the district is divided into 6 divisions, 27 wards and 124 villages. Its total area is 4,800 km^2 of which 3,075 is land and 1,725 km^2 is covered by water. The district is bordered by Nyamagana, Ukerewe and Ilemela Districts on the West, Bariadi and Kwimba Districts on the South, Bunda District on the Northern part and Serengeti national park (Serengeti District) in the East. The total population of the area by 2007 was 459,422 (223,109 males, 236,313 females) with growth a rate of 2%. The total number of households in the area is 70,525.

The main economic activities in the district are farming and livestock keeping which contribute about 85% of the district's income, fishing (10%), business and formal employment which together are contributing 5% of district income. In Magu 66% of people are involved with farming only while 15.6% are involved with both farming and livestock keeping. Fishing provides employment for 15% of the population and the rest are in formal employment and small scale business which account for 5.2% of employments. The district temperature varies from 25^0 C to 30^0 C. There are 2 rainy seasons yearly with rainfall range between 700 mm to 1000mm.

Magu District was selected for this study because compared to other Districts, no scientific research has been done in the area concerning the factors influencing the enrollment into CHF.

3.3 Study Design

A cross sectional descriptive study was conducted in Magu district in March 2009. We employed a quantitative research method to collect information from the households using semi structured questionnaire which was translated from English to Kiswahili language. The design was chosen due to its ability to cover large population in a given short time

3.4 Study Population

The study population Included head of households or their spouses who were above 18 years of age and were residents of Magu District. The respondents had to accept and sign the consent notes before filling the questionnaire.

3.5 Sample Size Determination

The minimum sample size was calculated using the formula

$$n = \frac{Z^2 P (100 - P)}{SE^2}$$

Where;

n = Minimum sample size

Z = Standard value which corresponds to 1.96 (at 95% confidence interval)

P = Proportion; Average proportion for CHF enrollment in the country is 10% (25)

SE = Margin of error (5%)

$$n = 2^2 \times \frac{10 (100 - 10)}{25}$$

n= 144.

3.6 Sampling Method

A multi stage sampling method was used to obtain the participants of the study. From the district level, wards were divided into urban and rural clusters (urban and rural division follow the government division). After getting the list of all wards from the council office, two wards from rural and two wards from urban were selected randomly to participate in the study. From each ward, four villages / streets were selected using a table of random numbers making a total of 16 villages/streets. A total of 223 households were involved in the study, of which 136 participants were from urban wards while 87 respondents were recruited from rural areas.

3.7 Inclusion Criteria

To be included in the study one has to be the head of household or a spouse, resident of Magu District for more than one year and aged above 18 years.

3.8 Research Assistants

Two people with secondary education were recruited for data collection. The recruited interviewers received one week of training on CHF and data collection techniques. The principal investigator coordinated day to day overall activities for data collection, verification and ensured quality and consistency of data collected from the field.

3.9 Study Variables

Independent Variables

i. Age
ii. Sex
iii. Level of education
iv. Income receiving pattern

Dependent Variables

i. Knowledge about CHF
ii. Enrollment into CHF

3.10 Data Management and Analysis

The principal investigator, who is the author of this work was responsible for guiding and supervising the filling of the questionnaire and checking of all interviews to assure correctness.

Data cleaning was done manually and by the use of computer. The analysis of data was done by using SPSS version 13 computer programme.

3.11 Ethical Consideration

Ethical clearance for this research was granted by the Research and Publication Committee of Muhimbili University of Health and Allied Sciences (MUHAS).

Permission to conduct the study was obtained from the Magu District Council office and from the ward level, permission was obtained from the ward executive officer. Individual respondents were also asked for their consent to participate in the study. They had to give consent by signing or stamping the right thumb on the consent form. Respondents were informed that participation is on voluntary basis, the right and withdrawal were upon the decision of the respondent. They were also informed about the purpose of the study. All participants were assured of the confidentiality of the information they provide to the interviewer. Anonymity was assured by not recording names of the respondents on the questionnaires apart from the serial number that were given to each questionnaire. Participants were informed about benefits of the study and that there is no risk involved on participating in the study. Data collected from participants were safely stored such that it was only accessed by appropriate persons involved in the study.

3.12 Study Limitations

i. Some heads of household refused to participate in the study.

ii. Some eligible people whose houses were included in sampling were not at home during the interview time hence some information might have been missed.

iii. Heavy rain, lack of transport and poor infrastructure denied the research team access to some areas which were included in sampling. This was more in rural wards of Sukuma and Kahangara.

iv. In some areas respondents either did not understand or partially understand Kiswahili. In this case either the RA had to translate the questions to her (which might have distorted the meaning) or not continue with interview depending on the situation.

v. Some village leaders did not want to give cooperation during data collection

CHAPTER FOUR

4.1 RESULTS

4.2 SOCIAL DEMOGRAPHIC PROFILE

The study population consisted of 223 households living in Magu District, selected from 4 wards. Magu Urban ward had 30.9% of respondents, Kisesa had 30%, Sukuma had 19.7% and Kahangara had 19.3% (Figure1). The difference in numbers of respondents from these wards was due to poor infrastructure, heavy rain and communication problems from the two rural wards (Sukuma & Kahangara). Among the 223 respondents, 52% (116) were females while 48% (107) were males .The predominant age group was that of 26 – 32 (35.4%), followed by that of 33 – 39 (18.4%) (Table1). The mean age was 36.6, ranging from 19 to 79.

Figure 1: Distribution of participants by Wards

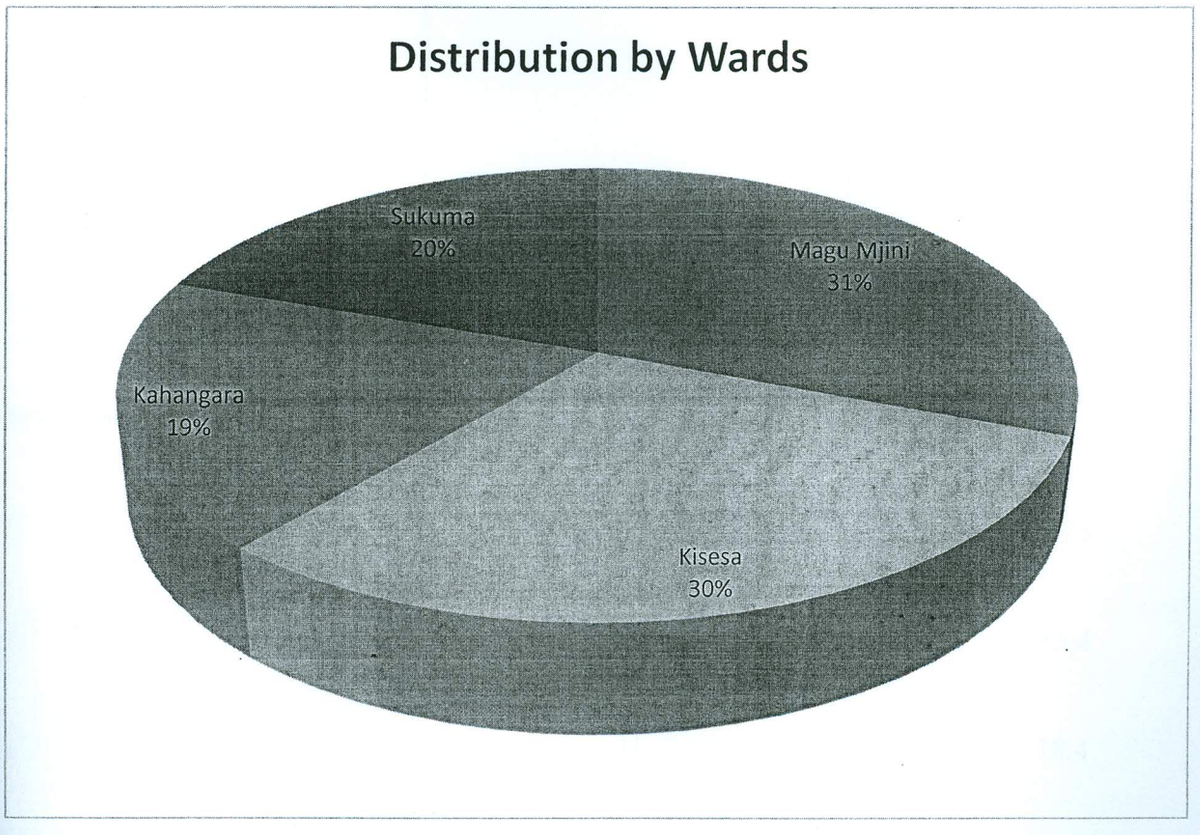


Table 1 shows that, 65.9% of the respondents had a primary education with only 1.3% with post secondary education. The pre dominant occupation was peasantry, with 51.6% of all respondents while those in formal employment were 15.7%. Those in informal employment (self employment and small scale business) were 27.8%. As reflected by their occupation, 51.1% reported to receive their income once in a year while those who receive their income on daily basis or those who have no regular pattern for income account for 30.5% (Table 2).

Table 1: Socio - Demographic characteristics

	Frequency	**Percent**
Sex (n= 223)		
Male	107	48.0
Female	116	52.0
Age group (n = 223)		
19 – 25	30	13.5
26 – 32	79	35.4
33 – 39	41	18.4
40 – 46	33	14.8
47 – 53	21	9.4

Above 54	19	8.5
Education level (n = 223)		
No formal education	25	11.2
Primary Education	147	65.9
Secondary Education	48	21.5
Post Secondary Education	3	1.3

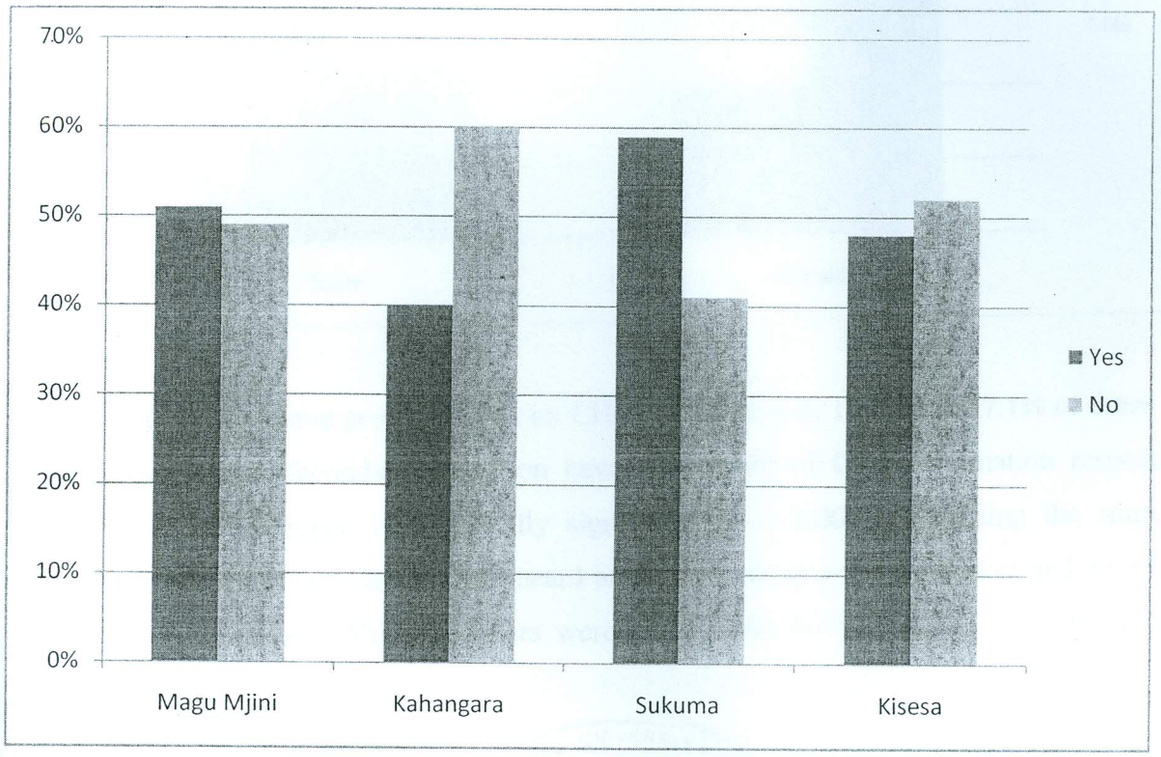
Table 2: Occupation by income earning pattern

Occupation	Income earning Pattern				Total
	Once a year	Monthly	Daily	Irregular	
Employed	0(0%)	35(94.6%)	0(0%)	0(0%)	35(15.7%)
Self Employed	0(0%)	2(5.4%)	25(51%)	2(8.7%)	29(13%)
Peasant / Farmer	114(100%)	0(0%)	0(0%)	1(4.3%)	115(51.6%)
Entrepreneur	0(0%)	0(0%)	24(49%)	9(39.1%)	33(14.8%)
Unemployed	0(0%)	0(0%)	0(0%)	10(43.5%)	10(4.5%)
Housewife	0(0%)	0(0%)	0(0%)	1(4.3%)	1(0.4%)
Total	114(100%)	37(100%)	49(100%)	23(100%)	223(100%)

4.3 KNOWLEDGE AND ATTITUDE TOWARDS CHF

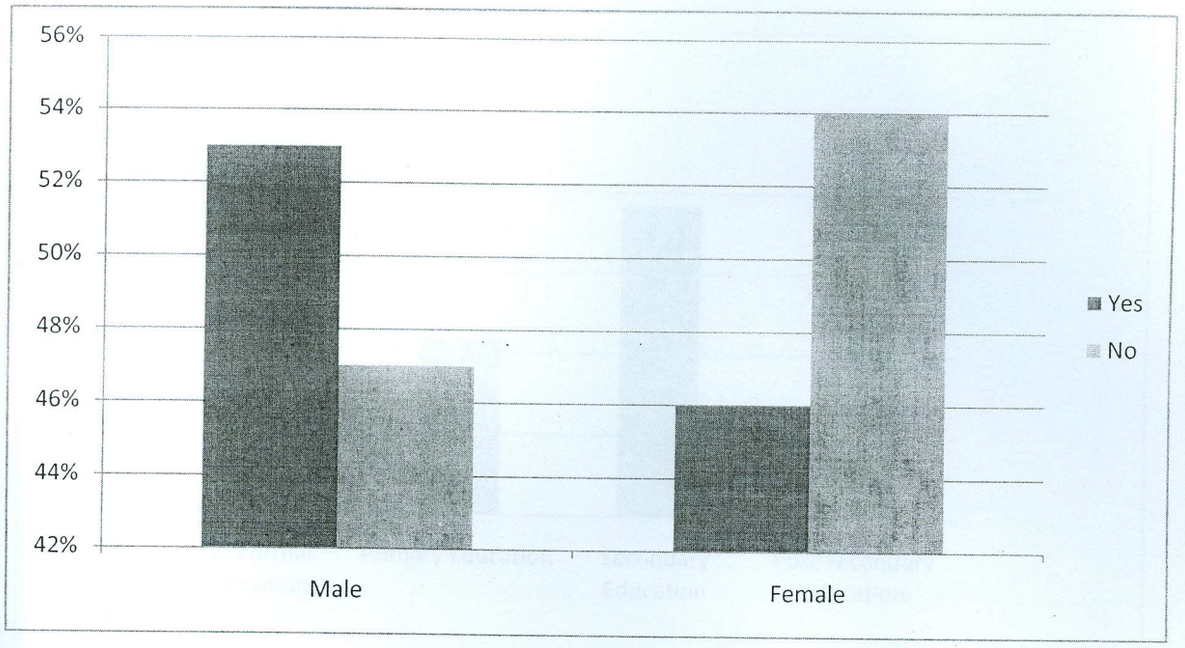
Respondents were asked if they ever heard of CHF and 49.3% replied yes, while 50.7% had never heard of CHF. Sukuma was the ward with highest number of respondents who had ever heard of CHF (59.1%) and the least was Kahangara (Figure 2). Among male respondents, 53.3% had ever heard of CHF compared to 45.7% of females (Figure 3).

Figure 2: Ever heard about CHF by location



MUHIMBILI MEDICAL UNIVERSITY COLLEGE
LIBRARY
DSM.

Figure 3: Ever heard about CHF by Sex



Education appears to have positive effect on CHF information as 100% and 77.1% of those with Post Secondary and Secondary education have ever heard of CHF information respectively (Figure 4). The difference is statistically significant (P = 0.000). Regarding the source of information, 24.5% of respondents had heard about CHF from a health worker and 27.3% had read about it on posters. Village leaders were responsible for informing only 18.2% of the population (Figure 5).

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Figure 4: Ever heard about CHF by level of Education

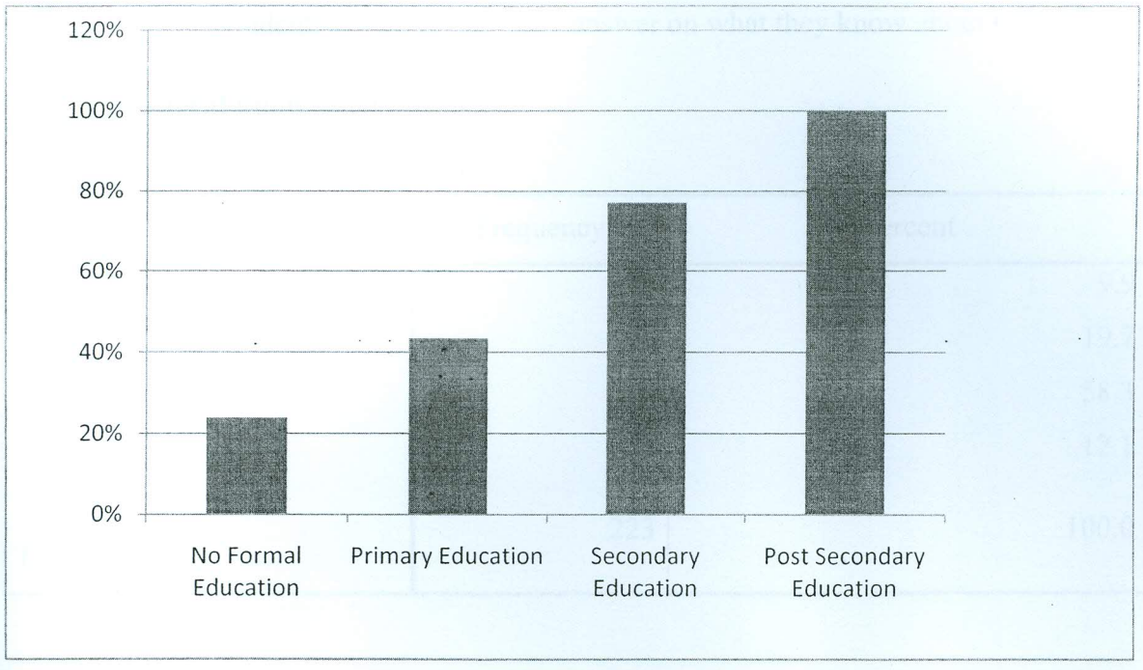
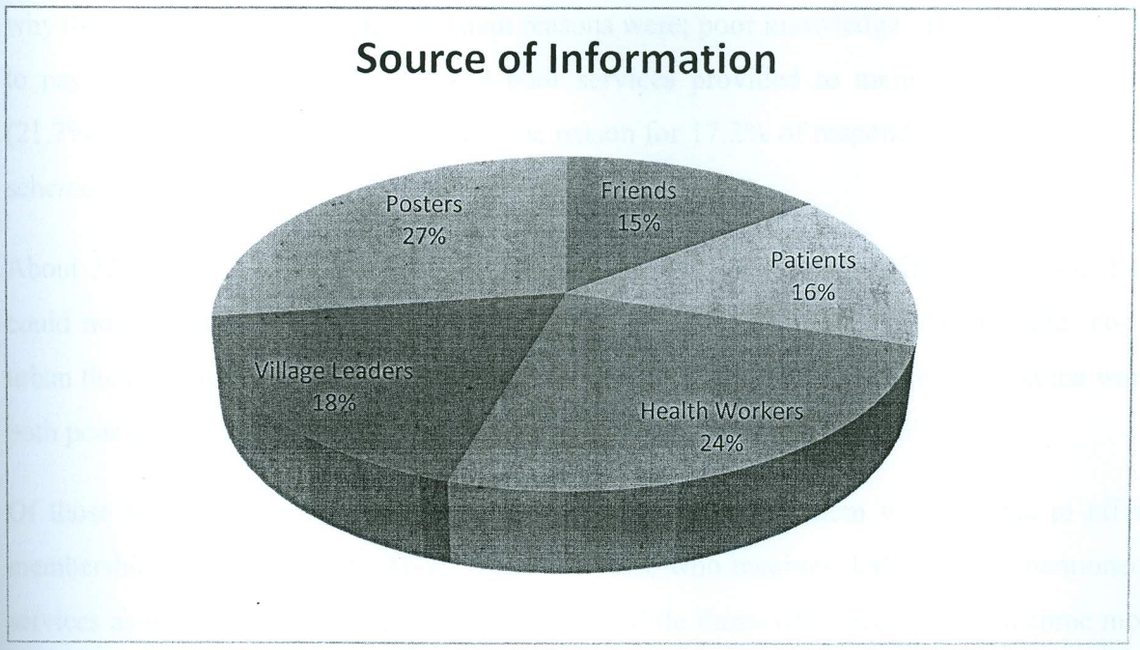


Figure 5: Source of CHF information



When asked to respond on, what do they know about CHF, the main responses were to join the fund you have to pay the annual fee of 10,000/= and it is a pre payment scheme (9.9%). More than a half of respondents could not give any answer on what they know about CHF (Table 3).

Table 3: General knowledge on CHF

	Frequency	Percent
Pre payment scheme	22	9.9
Annual fee is 10,000	44	19.7
I don't know	130	58.3
Others	27	12.1
Total	223	100.0

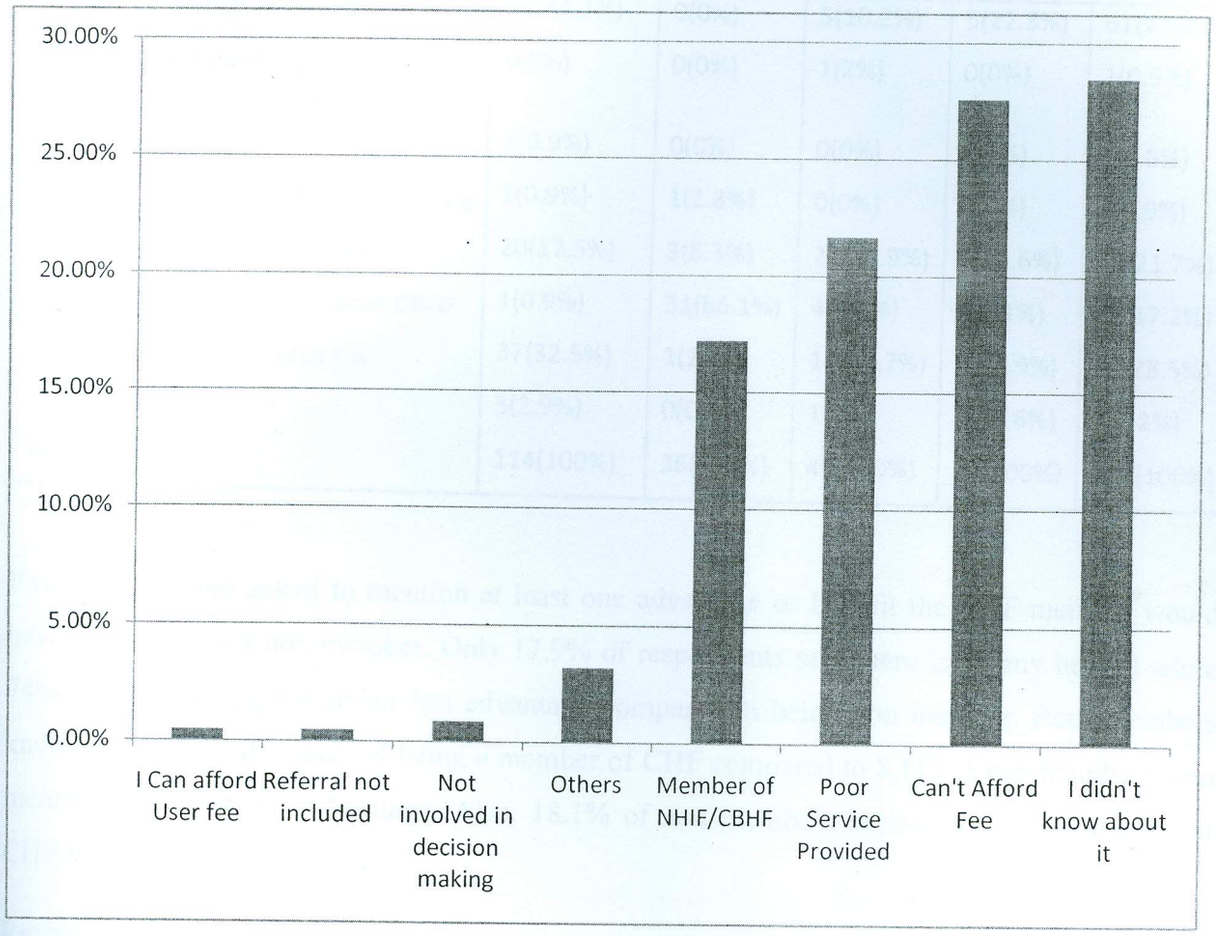
Among all the households involved in the study, only 2 (0.9%) were members of CHF, both from urban wards (Magu Mjini and Kisesa). Each household had different reason for joining the scheme; one mentioned that as member you pay less in total compared to payment over the counter and the other respondent reported that one is free to attend health facility any time even if he/she does not have money, therefore is assured of treatment. When respondents were asked why they had not join the CHF, the main reasons were; poor knowledge on CHF (28.5%), unable to pay membership fees (27.6%) and poor services provided to members at health facilities (21.7%). Being a member of NHIF was the reason for 17.2% of respondents not to join the CHF scheme (Figure 6).

About 32.6% of the respondents from Kahangara and 42.4% from Kisesa reported that they could not join the CHF because they could not afford to pay the membership fee. For Magu urban the main reason was poor knowledge about the fund (35.3%) while for Sukuma ward was both poor knowledge (27.3%) and failure to afford membership fee (27.3%).

Of those who receive their income once per year, 44.7% of them were unable to afford the membership fee to join CHF. About 44.9% of those who receives daily income mentioned poor services as the main reason for not joining CHF while those who receive their income monthly,

86.1% were members of NHIF or other CBHF scheme and hence they had no reason to join CHF (Table 4).

Figure 6: Reason not to join CHF



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Table 4: Reason not to join CHF by income earning pattern

Reason not to Join CHF	Income earning Pattern				Total
	Once a year	Monthly	Daily	Irregular	
I can't afford membership fees	51(44.7%)	0(0%)	5(10.2%)	5(22.8%)	61(27.6%)
I can afford to pay user fee	0(0%)	0(0%)	1(2%)	0(0%)	1(0.5%)
Does not include referral services	1(0.9%)	0(0%)	0(0%)	0(0%)	1(0.5%)
Not involved in decision making	1(0.9%)	1(2.8%)	0(0%)	0(0%)	2(0.9%)
Poor service provided	20(17.5%)	3(8.3%)	22(44.9%)	3(13.6%)	48(21.7%)
Member of NHIF / other CBHF	1(0.9%)	31(86.1%)	4(8.2%)	2(9.1%)	38(17.2%)
I didn't know what it is	37(32.5%)	1(2.8%)	16(32.7%)	9(40.9%)	63(28.5%)
Others	3(2.9%)	0(0%)	1(2%)	3(13.6%)	7(3.2%)
Total	114(100%)	36(100%)	49(100%)	22(100%)	221(100%)

Respondents were asked to mention at least one advantage or benefit the CHF member would have compared to a non member. Only 17.9% of respondents said there is no any benefit while 74% admitted being a member has advantage compared to being non member. Both members knew at least one advantage of being a member of CHF compared to 8.1% of non members who mentioned at least one advantage. Also, 18.1% of non members believed being a member of CHF has no any benefit (Table 5).

Respondents who showed negative attitude on CHF were 25.6%, while 43.9% when asked to comment on their attitude, insisted that the authority should increase sensitization on CHF in their areas.

Table 5: CHF Benefits by Membership of CHF

	Member of CHF		Total
Advantage of CHF	yes	no	
Pay once a year	1(50%)	83(37.6%)	84(37.7%)
Pay less than over the counter payments	1(50%)	80(36.2%)	81(36.3%)
There is no any benefit	0(0%)	40(18.1%)	40(17.9%)
I don't know	0(0%)	18(8.1%)	18(8.1%)
Total	2(100%)	221(100%)	223(100%)

4.4 COMMUNITY INVOLVEMENT IN THE CHF MANAGEMENT

When respondents were asked if they had ever attended any meeting in the village which had CHF among the agenda, only 0.9% admitted to attend such a meeting. Of these who ever attended the meeting, both of them managed to mention atleast a benefit that being a member of CHF one has compared to non member (Table 6). In all the meetings attended by those 2 respondents, sensitization for joining CHF was the meeting agenda. Of those 2 respondents who said they knew how the funds collected were used by the CHF authorities, only one got it correct by saying it is used to buy equipments for the health facility. The other one said the money is taken to central government fund (which is not correct). Unfortunately, none of those who had attended a meeting with CHF agenda was able to mention how the collected funds were used by the authority. Almost all respondents admitted that they do not know if there is a CHF committee in their area.

Table 6: CHF Benefits by CHF meeting attendance

	Ever attended CHF meeting		Total
Advantage of CHF	Yes	No	
Pay once a year	1	83	84(37.7%)
Pay less than over the counter payments	1	80	81(36.3%)
There is no any benefits	0	40	40(17.9%)
I don't know	0	18	18(8.1%)
Total	2(0.9%)	221(99.1%)	223(100%)

4.5 COMMUNITY PREFERENCES ON HEALTH SERVICE PROVIDERS

Most people at the study area preferred a government health facility as their first choice when they get sick. More than three quarter of the respondents mention government facilities as their most preferred health facilities while 11.2% said they prefer to go to drug store. Of those who receive their income once in a year, 78.9% preferred government facility while for those who receive their income monthly, 91.9% preferred the government facilities (Table 7).

For those who preferred to get their treatment at government facilities, most of them gave the reasons that they provide service at cheap price (35.1%) and it is near the place they live (24.7%). Provision of good services was not seen as attraction for many respondents to use government facilities. However, provision of good services was the main reasons for almost all those who prefer private facilities (94.7%). Those who preferred to go to drug stores gives many different reasons, including there is no drugs at government facilities, stores are owned by 'doctors' from government facilities, they can provide tailor made dose according to your money and there are many choices of drugs (Table 8)

Out of pocket payment was the main means of financing health services at the service providers (82.1%) followed by use of NHIF cards (14.1%) (Table 9).

Table 7: Most Preferred health care provider by income earning pattern

	Most Preferred provider	Income earning Pattern				Total
		Once a year	Monthly	Daily	Irregular	
	Government facility	90(78.9%)	34(91.9%)	32(65.3%)	18(78.3%)	174(78%)
	Private for profit	4(3.5%)	2(5.4%)	11(22.4%)	2(8.7%)	19(8.5%)
	Traditional Healer	4(3.5%)	0(0%)	0(0%)	0(0%)	4(1.8%)
	Drug stores	16(14.0%)	1(2.7%)	6(12.4%)	2(8.7%)	25(11.2%)
	Others	0(0%)	0(0%)	0(0%)	1(4.3%)	1(0.4%)
Total		114(100%)	37(100%)	49(100%)	23(100%)	223(100%)

Table 8: Preferred health service provider by reason for preference

	Reason for preference						Total
Most preferred Provider	Only available facility	Cheap	Near my place	Good service	Member of CHF	Others	
Government facility	24(13.8%)	61(35.1%)	43(24.7%)	5(2.9%)	30(17.2%)	11(6.3%)	174(100)
Private for profit	0(0%)	1(5.3%)	0(0%)	18(94.7)	0(0%)	0(0%)	19(100%)
Traditional healer	0(0%)	2(50.0%)	0(0%)	0(0%)	0(0%)	2(50.0%)	4(100%)
Drug store	0(0%)	2(8.0%)	0(0%)	0(0%)	0(0%)	23(92.0%)	25(100%)
Others	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(100%)	1(100%)
Total	24(10.8%)	66(29.6%)	43(19.3%)	23(10.3)	30(13.5%)	37(16.6%)	223(100)

Table 9: Financing of health services by income earning pattern

How treatment is financed	Income earning Pattern				Total
	Once a year	Monthly	Daily	Irregular	
Cash	112 (98.2%)	6(16.2%)	45(91.8%)	20(87.1%)	183(82.1%)
Loan yearly payment	0(0%)	0(0%)	0(0%)	1(4.3%)	1(0.4%)
Exchange property for service	1(0.9%)	0(0%)	0(0%)	0(0%)	1(0.4%)
Use of CHF cards	0(0%)	1(2.7%)	0(0%)	1(4.3%)	2(0.9%)
Use of NHIF / other CBHF	1(0.9%)	30(81.1%)	4(8.2%)	1(4.3%)	36(14.1%)
Total	114(100%)	37(100%)	49(100%)	23(100%)	223(100%)

The results shows there is still a large proportion of respondents who do not have proper information about CHF and there is poor community involvement in the area although the district has a potential for CHF growth due to people preference on using government health facilities which are accredited to provide service for CHF members

CHAPTER FIVE

5.1 DISCUSSION

Community Health Fund (CHF) was introduced in order to reduce the financial barriers of access to health care. Despites its advantages, the policy have not been successful in most areas in Tanzania. This study aimed at determining factors which are reported by the community to affect their enrollment into the CHF. It looked on the obstacles which if worked out, the community enrollment to CHF is expected to increase. The study has managed to identify a number of factors which have to be worked out for the policy to be successfully implemented in Magu District.

5.2 Knowledge and attitudes towards CHF

The findings of the study show that only 49.3% of the respondents were aware of the CHF. Male respondents were more aware than female and Level of awareness increases with education level. Awareness level in Magu is not good compared with other areas in the country. Mwendo found the level of awareness in Iramba district to be 95.8% (19) while in Mufindi district it was found to be 98.7% (26) and 94.9% in Songea rural District (22).

Information dissemination is vital for success of any new policy plan to be implemented. *Consumer theory assumes that if consumers are perfectly informed, they maximize their utility as a function of consuming various goods……* (27). In all those areas where level of awareness on CHF is high, authorities have played very big role in providing information to the community. In Songea rural, village leaders and health service providers were the major source of information with regards to CHF (19 and 22). In Magu, less than half of respondents who are aware of CHF identify both health workers and village leaders as their primary source of information regarding CHF. Horizontal communication seems to be used more in Magu to disseminate CHF information, where more respondents receive information on CHF from neighbour / friend or fellow patient than from village leaders or health care workers. The problem of horizontal communication is that information can be distorted when transferred from one source to another lead into delivering of wrong information.

5.3 CHF Membership

The study results show that less than one percent the respondents households were members of CHF. This finding differs from the December 2008 CHF report of the district which showed only 0.2% of households were members (13). The differences can be either due to small sample size of this study or due to the fact that the report was made by using recruitment data three months before data collection for this study. However, the proportion of households that are members of CHF found by this study in Magu is very low compared with 28.7% found in Mufindi District (26) and 4.7% in Iramba District (19).

The data collection for this study was done in less than 2 years since the start of CHF in Magu. However this cannot be used as excuse for small enrollment since experience show that, normally CHF peak during the first year of establishment. In Hanang for example, the members number peak up to 23% in its first year of 1999. This is mostly due to massive awareness campaign during and after the launching. The number however, decreased to 4% and then 3% in 2000 and 2001 respectively (18). So, for the Magu District to start with household membership proportion of less than one percent in the first year is an indication that the future of the fund is not bright.

In this study, only 17.2% were found to be members of NHIF. In theory this makes the remaining proportion to be the target population for CHF membership. Lack of knowledge concerning CHF, poor services provided by government facilities and inability to pay membership contribution were mentioned by those who were non members as the main reasons for not joining the CHF. The finding corresponds with the findings of study done in Mufindi (26) and Iramba (19). Poor quality of care provided to the Community Health Fund (MHO) members was also the main reason for the poor enrollment in Conakry – Guinea (28) and lack of knowledge about the existence of the fund and the benefits offered was also cited as the reason for low enrollment in Uganda (29,30). The fact that these factors were already observed in other studies implies that Magu authority neither learned from other districts mistakes nor from their pre test findings to avoid policy failure. Proper information to community could have increased the number of membership since a substantial number of households lack information that would

attract them to join. Surprisingly, a number of interviewees wanted to give their CHF contribution to research assistants after being told how CHF is working, so that they can be members on the same day.

Membership contribution of Tsh. 10,000 charged by Magu authorities is also charged by other districts like Hai, Simanjiro, Babati, Hanang, Monduli and Masasi (31). To reduce the number of non members due to failure to pay membership contributions, proper exemption mechanism has to be in place. However, a study done in Rwanda has indicated that there is no relationship between CBHI enrollment and households' socio economic background. In that study, precaution for the family health was the main reason members gave for enrollment independent of their socio economic background (27).

Most respondents had positive attitudes towards CHF. 74% agreed that being a member of CHF is more beneficial compared to non member. Benefits for CHF member which were most mentioned are; member pays only once in a year and get treated any time for free (assurance) and member pays less in total compared to non member (reduced cost). In its design, CHF is supposed to provide preventive and curative services to its members (12). In this study it seems people are not aware of preventive part of benefits supposed to be provided by CHF.

5.4 Community Involvement

Village meetings are good place for involving rural community in designing, planning and implementation of different activities in their areas. They are also useful source of information as other means of communications e.g. Radio, Television and News papers are not common due to the lack of electricity, poverty and their availability in rural area. The strategy of using village meetings in CHF involvement and information dissemination has been successful in Mufindi, Songea and Iramba Districts (19, 22 and 26). In Magu District however, less than one percent admitted to ever attend any village meeting with CHF agenda. And to prove the importance of these meetings, all who ever attend the meetings were able to mention at least one benefit of being a CHF member.

The CHF needs to give the community a greater say in the planning and management of the fund activities so as to strengthen community participation in health (12). In Uganda, lack of community involvement in the Ishaka Community Insurance scheme was found responsible for poor enrollment in the scheme (29). Village health committee and ward CHF health committee are supposed to be platform for village community to be involved in planning and management of CHF. In this study, not only that there is no respondent who ever participate in the CHF management meeting but also they do not even know if the committees exist. Due to this poor participation, it is not surprising that only 0.5% of respondents were able to mention correctly at least one use of the funds collected by CHF. In comparison, a study done in Nzega shows 9% of participants admit to be involved in planning, implementation and evaluation of CHF (21). Involvement increases transparency, awareness and trust to the fund management.

5.5 Community preference on Health service provider.

Government health facilities are more preferred in the area. This is of advantage to CHF since only government health facilities are used as service providers. Affordability and accessibility were given as the main reason for preferring government health facilities. Considering user fee of Tsh. 2,500/- per visit for non CHF members (which respondents referred to it as affordable) then Tsh. 10,000 CHF contribution would be of much more benefit to members considering the number of hospital attendance per individual. This is different from area like Hanang where people were more willing to pay user fee of Tsh. 1,000 per visit than pay Tsh. 10,000 CHF contribution (18). Despite respondents preference to the government facilities, still the authority have to work on improving the quality of services provided as only 2.9% said they prefer government facility due to good services provided compared to 94.7% of those who attend private facilities. Poor services by government health facilities have been mentioned as reasons for low enrollment and/ or drop out for CHF members in Hanang, Iramba and Nzega (18, 19 and 21).

The problem of self medication has also emerged in this study where 11.2% mentioned drug store as their most preferred provider. The reasons given for choosing drug store are no enough

drugs at government facilities, owners of stores also provide consultation as they are health workers at the government facilities, tailor made dose according to money and more choice of drugs. Improvement of quality of services, including availability of drugs at government facilities may reduce this problem. Despite the common belief that the community in Lake zone prefer more to use traditional medicines and witchcraft beliefs during their social and health problems, in this study only 1.8% admitted to use traditional medicines as their most preferred service providers. However, this can be misleading as information regarding traditional healing as sometimes regarded as secrets.

The observation that cash is the mainly means to finance health care in all health service providers prove potential for CHF to be accepted by the community.

CHAPTER SIX

6.1 CONCLUSION AND RECOMMENDATION

6.2 Conclusion

This study was specifically looking for knowledge and attitudes towards community health fund, community involvement in the community health fund and community preference on health service provider in Magu district. The study found that people in Magu communities prefer government health facilities as their primary provider and that the people have good attitudes towards CHF scheme. The fact that the majority of the populations are peasants and people prefer government health facilities as their primary provider shows that CHF has important potential role in Magu district.

Magu suffer from very low enrollment into CHF scheme and this is mainly due to the fact that a large proportion of the population has not received proper information about CHF (particularly those with low education) and community involvement is very poor as evidenced by this study.

6.3 Recommendation

The author recommends the following to be done by Magu district council to increase enrollment into Community Health Fund;

i. Improve village leaders and health workers cooperation in CHF activities so as to raise awareness on CHF in the community
ii. Improve community involvement in CHF management by empowering village health committee and ward CHF health committee.
iii. Improve quality of services provided by government facilities.

iv. There is a need for more research concerning CHF specifically targeting management of CHF and health workers in Magu to produce firmer conclusion.

Reference List

1. Ministry of Health. Proposals for Health Sector Reform. Dar es salaam, 1994
2. Ministry of Health. National health policy. Dar es salaam, 1990
3. Hussein AK, Mujinja PG. Impact of user charges on government health facilities in Tanzania. East African Med. Journal, 1997, 74 (12): 751 – 7.
4. Binam JN, Nkama A, Mkenda R. Estimating the willingness to pay for community health prepayment schemes in rural areas: A case study of the use of contingent valuation surveys in centre Cameroon. Unpublished study.
5. Mwabu G, Mwanzia J, Liambila W. User charges in government health facilities in Kenya: effect of attendance and revenue. Health Policy and Planning Journal, 1995, 10(2): 164 – 170.
6. Nabyonga J, et al. Abolition of cost sharing is pro – poor: Evidence from Uganda. Health policy and Planning Journal, 2005, 20 (2): 100 – 108.
7. Carrin G, Waelkens M, Criel B. Community - Based Health Insurance in developing countries: a study of its contribution to performance of health financing systems. Tropical Medicine and International Health, 2005, 10 (8): 799 – 811.
8. Ministry of Labour, Employment and Youth Development. A paper presented by Dr. Ladis C. Komba, the permanent secretary Ministry of Labour, Employment and Youth Development in Tanzania, at the International workshop on promoting decent Work in Africa held at the Cape Hotel, Monrovia in Liberia from 7 – 9 September 2008.
9. Mtei G, Mulligan J. Community Health Fund in Tanzania: A literature review. Ifakara Health Institute, Dar es salaam, 2007.
10. The United Republic of Tanzania. Community Health Fund: Best Practices Summary. Dar es salaam, February 2007.
11. The United Republic of Tanzania. The Community Health Fund Act, 2001
12. Ministry of Health. Community Health Fund Design, Dar es salaam, 1999

13. Magu District Health Officer's office. CHF Monthly status report: January to March 2009, 2009.
14. Magu District Health Officer's office. CHF Monthly status report: July to December 2008, 2009.
15. Dolan P and Olsen J.A. Distributing Health Care: Economic and ethical issue. New York: Oxford University Press, 2002.
16. International Labour Organization. Extending social protection in health through Community Based Health Organizations: Evidence and challenges, Geneva 2002.
17. Shaw P.R. Tanzania's Community Health Fund: Prepayment as an alternative to user fees. World Bank Institute, Flagship on line journal on Health Sector Reform and Sustainable Financing, 2002.
18. Chee G, Smith K, Kapinga A. Assessment of the Community Health Fund in Hanang District, Tanzania. Partners for Health Reform Plus, 2002
19. Mwendo H.M. Accessibility and sustainability of health services in Iramba District: Three years after Community Health Fund implementation. Masters of Public health thesis, 2001
20. Ministry of Health. Assessment of CHF in Tanzania: Factors affecting enrollment and coverage. Dar es salaam, 2003.
21. Mhina L.G. Factors contributing to high drop out of CHF members in Nzega district. Masters of Public Health thesis, 2005
22. Hussein AK, Mlangwa MN, Hussein KN. Community awareness and preferences on health financing options: The case of Songea Rural District, Tanzania. East African Journal of Public Health, 2005, 2 (2): 18 – 21.
23. Humba E. Social health Insurance. Implementing social security health care: The experience of National Health Insurance Fund. The paper presented at International Social Security Association (ISSA) Regional Conference for Africa. Lusaka, 2005
24. Kihombo A.R.M. Health Insurance in Tanzania: Enrollment determinants in the Community Health Fund (CHF) – The case of Kilosa District. A PhD Thesis, 2004.

25. Kamuzora P, Gilson L. Factors influencing implementation of the Community Health Fund in Tanzania. Health Policy and planning journal, 2007, 25: 95 – 102.
26. Mahingika H. Factors contributing to joining and dropping out of Community Health Fund in Mufindi District. Masters of Public Health thesis, 2007.
27. Schneider P. Why should the poor ensure? Theories of decision making in the context of health insurance. Health Policy and Planning, 2004, 19 (6): 349 – 355.
28. Criel B and Waelkens M P.Declining subscriptions to the Maliando Mutual Health organization in Guinea – Conakry (West Africa): What is going wrong?. Social science and medicine, 2003, 57 (2003): 1205 – 1219.
29. Basaza R. Community Health Insurance: Experiences in the context of political, economic and governance concerns: Why has enrolment remained small? Paper presented at a conference at Tilburg University, Netherlands, August 29 – 31. 2002.
30. Kyomugisha E. L et al. Building strategies for sustainability and equity of pre payments schemes in Uganda: Bridging the gaps. EQUINET discussion paper 59, April 2008.
31. Ministry of Health. Report of Community Health Fund evaluation workshop held in Mwanza (22nd – 27th July 2002) and Morogoro (4th – 9th August 2002). Dar es salaam, 2002.
32. Schneider P and Diop F. Impact of pre payment pilot on health care utilization and financing in Rwanda: Findings from final household survey. 2001,The Partners for Health Reformplus (PHR plus) project, Abt Associates inc.