THE USE OF HEALTH INSURANCE MEMBERSHIP CARDS: IS MISUSE OF CARDS BEING ADDRESSED AMONG COMMUNITY HEALTH FUND AND NATIONAL HEALTH INSURANCE FUND MEMBERS IN IRINGA RURAL DISTRICT?

BY

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

2005

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance of the award of the degree by the University of Dar-es-Salaam a dissertation entitled: *"The use of Health Insurance Membership Cards: Is Misuse of Cards being addressed among Community Health Fund and National Health Insurance Fund members in Iringa Rural District?"* in partial fulfillment of the requirement for degree of Master of Public Health.

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Date...14th November, 2005...

DECLARATION

I, Elizabeth Shekalaghe, declare that this dissertation is my own original work and that, it has not been presented, and will not be presented to any other University for a similar or any other degree award.

Signature.....

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ABSTRACT

A number of health care financing strategies have been adopted in Tanzania to address the problem of insufficient financial resources and seeking to correct inefficiencies in the health care delivery system, in order to make it more cost effective, and able to provide better quality services.

As providers in developing countries increasingly charge user fees, community have felt the need to plan for the future costs of health care which led to emergence of prepayment schemes Community Health Fund (CHF) and National Health Insurance Fund (NHIF).

A cross sectional study was conducted to explore the use of CHF and NHIF membership cards among members and to establish how misuse of cards is addressed by providers of health care. Study groups consisted of head of households, health providers and CHF and NHIF members visited health facilities. Both qualitative and quantitative data collection methods were used to collect the required data. Data was analyzed using Epi info 6 version, where appropriate associations and strength of relationship between independent and dependent variables were obtained using the appropriate stastistical test, were needed.

The findings of this study show that, some of respondents reported that they would not have been able to pay for services if they had not registered as members of the schemes. About 73.9% of NHIF members reported not to be satisfied with the services received because the amount of money they contributed do not match with the quality of services provided.

It was also reported that , some of members of the households had used relatives's or friends' c ards to seek care, a lthought they were not registered a s members. Apart from passing over cards to non-members, members were reported to visit the facilities without membership cards. However, none of the health facilitity could explain what was done to monitor and control the use of cards.

The study recommends that there should be a proper monitoring system in the use of cards. Furthermore, more studies have to be conducted to explore ways of reducing misuse of cards.

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LIST OF ABBREVIATIONS

CHF	-	Community Health Fund
HW	-	Health Worker
KI	–	Key Informant
MOH	–	Ministry of Health
MPH	–	Master of Public Health
MUCHS	–	Muhimbili University College of Health Sciences
NHIF	-	National Health Insurance Fund
WHO	–	World Health Organization

CHAPTER ONE

1. INTRODUCTION

The ability of the poor in the population to gain access to the formal health system has long been a concern of African governments. In Tanzania, free health care for all was offered as one of the social policies to attain equity in the health care provisions until in the 1980's, when the government could no longer afford to provide free health care. The benavelency was frustrated by the economic crisis of the late 1970's and early 1980's, which did not spare the health sector.

Due to the inadequate financing, the quantity and quality of health care provided by the public health facilities detoriated. The health sector experienced adverse shortage of drugs and equipment and this resulted into poor morale of health workers. The need for fundamental changes in health care delivery was therefore realized, hence the Health Sector Reform (HSR) was introduced in 1994 (MOH, 1994).

Furthermore, the crisis in the health sector led to the emergence of many community based health financing schemes in different regions of the developing world, particularly in Sub-Saharan Africa (Jutting, 2001, Wiesmann and Jutting, 2001; Preker et al., 2001). There has been a decline in use of primary health care facilities.

This was found to be a result of inefficiencies inherent in the public health care delivery system. Also, the demand side problems were worsened by a number of factors; the low fee charged at all facilities could not encourage patients to use the lowest-level facilities. In addition, the district or regional hospital may be the only health facility that is geographically accessible to the local community and therefore, insufficient funding for primary health care facilities lowers the quality of service they can provide, which also discourages use.

Health Sector Reforms focus on more than just an improvement in health care. It addresses the sustainability, purposefulness and fundamental change in the health systems (Berman, 1995). Health Sector Reforms were therefore initiated to revive the collapsing health sector. Among eight reforms, the health financing reform was one. It called for introducing alternative financing mechanisms, and hence user fees were introduced in early 1990's(MOH, 1994).

User fees were introduced, gradually starting with the non-essential services until when most services were covered; there were fears that the poor were being denied necessary health care (Jutting,. 1997). However, there was a decline of utilization of outpatient services in public health services in Dar-es-Salaam following introduction of user charges in 1993 (Mujinja et al, 1997).

Apart from introducing user fees, other health care financing strategies were also adopted to address the problem of insuffient funds and attempt to correct inefficiencies in the health care delivery system in order to make it more cost effective and able to provide better quality services.

The financing strateries were introduced to ensure that there is an appropriate share of public funds spent on health care, especially at local levels. The introduction of the financing mechanism also aimed not only to improve health status and client satisfaction, but also improving equity of access to care (MOH, 1994).

Various options of health care financing were developed to incorporate cost and risk sharing and rationalization of resources. Two of the health financing alternatives based on the cost sharing and rationalization of resources were CHF and NHIF (MOH, 1999). The implementation of these financing strategies has a long-term objective of ensuring that provisions of appropriate and effective health services would improve the health status of the population. But after the introduction of these financing options, it has been realized that some of them especially social insurance schemes have not increased efficiency in quality of services provision because a very small proportion of total health care is covered by cost sharing (Janowitz et.al.,1999)

As the health providers in developing countries increasingly charge user fees, the members of the community have felt that there is a need to secure means of accessing health care services even when they do not have finance during the time of illiness. This has led to the emergence of prepayment schemes. In southern Africa, Tanzania was among the first countries to introduce such schemes and therefore CHF and NHIF were initiated.

Community Health Fund was introduced in June 1996 and piloted at Igunga District, in Tabora.The pre-payment program for communities is required to be made on an annual collection basis. The pre-payment is made by purchasing a health card sold at a flat rate and would contains benefits as a basic package of curative and preventive health services. Hence most of CHF income is derived from cost sharing and matching funds. This pre-payment program has a focus on those who are outside the formal sector.

Among other reasons, CHF was established to address the problem of accessibility and quality of care; it broadens the pool of resources available for delivering primary level care and shares risks and benefits among community members. The CHF can be seen as a supplement to user fees for communities in rural areas, which enable a household to pre-pay a small amount to the local fund in exchange of assurance of the health care at the time of need. Furthermore, CHF is intended to narrow the

financing gap at the local level and make drugs and medical supplies at local health care units available because Tanzania health care is operated by the law of scarcity. The CHF can make a useful contribution in the financing of health care by targeting the financing gap in the provision of health services. Currently, the CHF can pay for up to 25 percent to 74 percent of the cost of drugs in dispensaries and health centers (MOH, 2002).

In the process of widening up the options of sustaining the health financing system, in 2001 the government introduced the National Health Insurance Fund (NHIF) as a complementary pre-payment scheme. The NHIF was a compulsory program introduced to cover the formal sector of employment and provides a wide range of health services. The National Health Insurance Fund was established under the Act No. 8 of 1999. The scheme operates more or less the same as CHF scheme through issuance of membership card which carries benefits for a member to utilize health services.

The law that establishes NHIF requires all civil servants to join the scheme, however stiff resistance was observed during the introduction of the Fund. Strong and vigourous campaigns and advocacy had to be mounted to convince members to join. According to the patients' records available, it has been reported that there is a high utilization of health services among NHIF members (Maarifa, 2005)

In addition, the Ministry of Health has prepared operational guidelines for both CHF and NHIF schemes which were given to accrediated health facilities. These guidelines consist of terms of references and responsibilities of health care providers, benefit health packages among other things.

This study aimed at assessing factors which contribute the high utilization of services through use of cards in both schemes and explore whether is due to moral hazards or quality of care.

1.2 STATEMENT OF THE PROBLEM

Cost sharing was introduced in 1993 to supplement financing options for improving the deteriorating quality and quantity of health services. It was however realized that cost sharing in the form of user fees could not meet consumer's expectations, and it limits the access to basic health care for the poor (Kapinga and Kiwara, 1999). Due to the inaccessibility problem, the government introduced Community Health Fund (CHF) and National Health Insurance Fund (NHIF) as other alternative financing options to improve access quality and to increase the quantity of health care. The CHF and the NHIF are two complementary health-financing mechanisms.

The CHF pre-payment scheme accommodates people in the informal sector who are required to pay membership fee on annual basis while the NHIF is meant for Civil Servants whom three percent of their monthly salaries are deducted for the Fund. However, it has been realized that each financing scheme has its own limitations and sometimes it induces their members to seek excessive health services.

When CHF was first introduced, a huge number of enrolments of members were reported. However with time the number of enrollees has constantly decreased due to several reasons; one being the poor quality of the services that members receives (Kiwara et al., 2002). This dropout of CHF members might have influenced the use of relatives' and friends membership cards.

The law which establishes NHIF required all civil servants to join the scheme and a stiff resistance to join the scheme was observed among the eligible civil servants. This was countered by strong campaigns and advocacy by the government. Since then, an increase in utilization of health services among the contracted health facilities have been reported to be increasing; Agakhan Health Centre is reported to have increased the health services for NHIF members from 6406 visits in 2002 to 11,895 visits in 2004, which is a forty six percent increase (Maarifa, 2005).

It is quite imperative that these two schemes have different benefit packages although both address two important issues; equity and quality. Apart from adhoc reporting by the CHF and NHIF managers on the increase of utilization of services among their members, there are no scientific studies that have explored and reported the use of membership cards in seeking health care. There is acdetal evidence that indicates that there has been a tremendous increase in utilization of health services among scheme members, and improved quality of care has been cited as the motive reason behind the increase.(Maarifa, 2005). However it is not known to what extent the use of cards influences utilization of health services among the two scheme members.

Secondly, as far as CHF is concerned, it has been found that, in the absence of a good registration and monitoring system, the number of beneficiaries has been

increased unnoticed to include relatives and friends who are not members of the respective households (MOH, 2004).

This study therefore, intends to explore among others, the extent to which use of cards influences the utilization of health services among CHF and NHIF members.

1.3 RATIONALE OF THE STUDY

Health financing aims at improving resource availability and accessibility of health services to the targeted population. The aim of this study is to establish whether the use of the card influences people to seek health care unnecessarily. The results of the study will help responsible authorities to improve the performance and monitoring the use of insurance cards which may influence the reduction of health care costs.

1.4 STUDY QUESTION

To what extend does moral hazard influences utilization of health services among CHF and NHIF members?

DEFINITION OF TERMS USED

Ability to pay – The capacity of an individual or organization to pay for goods or services in terms of money.

Access – the ability to receive health services and is influenced by demand and supply factors.

Accessibility – Extent to which a service is easy to use for its intended clients. This will depend on a number of factors such as costs, distance and the way in which services are organized.

Adverse Selection – A situation where insured people are able to purchase insurance at rates which are below actual fair rates because information known to them are not available to insurers.

Asymetric Information - Situation in which the parties on the opposite sides of transaction have differing amount of relevant information.

Household – Is a family composed of a man, one wife or single parent/guardian and children who are less than 18 years of age. In case of polygamous relationshisp, the different wives were regarded as belonging to different households.

Moral Hazard - An insurance term where services are not paid for directly by individuals, they may take a risk or act in a way which increases the demand for health care.

Risk Pooling – Process by which people contribute to a general fund from which they can be reimbursed if the need arises. This is a basis of all insurance funds where the cost of illness are then shared between members of the fund (risk are pooled)

Social Insurance – Government insurance programmes in which eligibility and premium are not determined by the practices common to private contracts. Premium is often subsdized and is typically re-distributed from some segment of that population to others.

Utilization – Use of existing capacity, often measured as an average over a period e.g. number of visits in the health facility.

CHAPTER TWO

2 .0 OBJECTIVES

2.1 BROAD OBJECTIVE

To explore the use of membership cards for CHF and NHIF prepayment schemes and how they influence excessive utilization of health services in Iringa Rural District.

2.2 SPECIFIC OBJECTIVES

1. To determine the use of membership cards among CHF and NHIF members for seeking care.
2. To determine the frequency of visits to the health facilities among members and non-members of CHF and NHIF.
3. To determine the ability to pay for current health care services for members of CHF and NHIF.
4. To determine the perception of members on the quality of care provided by the contracted health facilities.
5. To determine the attitude of members and non-members of CHF and NHIF on the quality of health services delivery.
6. To explore ways in which providers monitor use of CHF and NHIF membership cards.

CHAPTER THREE

3.0 LITERATURE REVIEW

3.1 Health Care Financing in Tanzania

Health Care Financing is one of the components of Health Sector Reform. Health care financing reform affects patient access to necessary health care though the impact on the poorer members of the households has not been fully investigated. The community tends to bypass the primary health facilities to seek care on their illinesses. It has been speculated that this impact could partly be due to the low prices of public-sector services, inadequate package of benefits and quality of health care offered at public facilities (Jutting, 2001).

Health care financing has strongly influenced both the provisions and the use of health care services. Health financing is therefore having important consequences on the quality of care, the efficiency of resources used and the equity of the health system. The financing of health care in most of the African countries was predominated by the central government which has proven to be of poor quality because the government was the major financer of health care. (Ogbu and Gallagher, 1992). However, the free services could not be sustainable as the government failed to finance the health care services due to the current economic changes; as a result

the health sector had to undergo reforms and therefore health care financing burden was shifted to individuals.

Under normal circumstances, cost sharing existence have not increased efficiency in quality of services provision because a very small proportion total health care is covered by cost sharing (Mwabu.et.al,. 1995, Janowitz et.al.,1999). On the other hand utilization rate studies have indicated that the fees does not discourage attendance at lower points of delivery of health care services provided quality is improved with the fees' introduction. The key reason for implementing successful self-financing insurance programs is to minimize adverse selection; moral hazard; and cost escalation (Shaw and Griffin 1995).

However other studies have shown that there was a decline of utilization of outpatient services in public health services in Dar-es-Salaam following introduction of user charges in 1993 (Mujinja et. al 1997). This happened because some users were not willing or able to pay and also because of poor quality of services. It is therefore important for health policies to focus on both the twin objective of equity and greater efficiency in the provision of health care services.

Other literature are devoted to health financing and the use of health insurance in different countries. Their experience provides public policy officials in other countries with considerable insight into the fundamental ingredients of an effective health financing strategy. In most African countries these financing schemes can be sustainable in a long term if serious attention is paid to their design and management. The presence of public health facilities that charge nominal fee and can take care of less serious disease conditions may be a deterrent to membership in schemes not based at public facilities. People know that they only need insurance cover for the more serious illness that may not be cured in a public hospital or for which they may choose admission into a mission hospital. In Kenya, user fees has been abolished in all public health facilities except dispensaries since 1989. All hospital employees are also required to join the National Health Insurance Fund, which pay for inpatient care, subject to hospital specific per diem rates.

In Tanzania, user fees were introduced in 1993 although services at rural health centers and dispensaries are still free of charge except in the districts that are implementing Community Health Fund (CHF) where patients do pay a fee. This means the introduction of prepayment schemes should meet consumer's expectations and make them appreciate the services which will in turn reduce the prevalence of them seeking care because of what health care has accomplished.

It has been reported that a successful prepayment schemes operate in Guinea-Bissau and Zaire. In Guinea-Bissau, villages are participating in a prepayment scheme for drugs and basic services through annual collections made shortly after harvest when cash is readily available. In Zaire's Bwamanda health zone, annual collections for a prepayment scheme for hospital services are made during the season when cash incomes are highest (World Bank,1995).

3.2 Health Insurance on the access of care

Health insurance is increasingly recorgnised as a tool to finance health care provision in low income countries (WHO, 2000). Given the high latent demand from people for health care services of a good quality and the extreme under-utilization of health services in several countries, it has been argued that social health insurance may improve the access to health care of acceptable quality. Whereas alternative forms of health care financing and cost recovery stratergies like user fees, have been criticized by many authors (Gilson, 1998) the option of health insurance seems to be a promising alternative as it is a possibility to pool risks, thereby transferring, unforeseeable health care costs to a fixed premium (Griffin, 1992).

However, there are some evidence that neither purely statutory social insurance nor commercial insurance schemes alone can significally contribute to increase the coverage rates and thereby the access to health care (Jutting, 2000). Recently, mainly Sub-Saharan Africa but also in a variety of other countries, non-profit, mutual,

community-based insurance schemes have emerged (Bennett et al. 1998, Wiesmann and Jutting, 2001)

3.3 Social Insurance and Moral Hazard

Social Insurance can be of two forms, government- run plan with a standardized benefit structure and contribution rates. The great advantages of of the social insurance approach is that, it is not viewed as a social welfare benefit, but a benefit earned through citizen contribution to an insurance plan (Meyers, 1981). People appear to be more willing to pay when they perceive a direct relationship between their contribution and the insurance benefit. Affluent nations have found that social insurance plans have wider public support and are more stable than social welfare programs (Ron, Smith and Tamburi, 1990)

Moral Hazard is among the major problems in insurance schemes and occurs when an insured person use health facilities more than they would have used without insurance coverage. In health insurance two kinds of moral hazard can be experienced, ex ante and ex post moral hazard. While ex ante moral hazard is reflected in the reduction of preventive effort in response to insurance coverage. Ex post moral hazard is revealed by the increased demand for medical services once illness has already occurred (Reichmann, 2002).

There have been several empirical studies analyzing the impact of co-payment on health care demand. Among these analyses there is a substantial amount of studies on ex post moral hazard in the demand for health care services. Experiences show that in our communities ex post moral hazard has been observed especially when people were forced to join the scheme. This can be practiced through passing over the benefit identity cards to relatives and friends because of the contribution one is made without utilizing the services effectively.

3.3 Health Service Expenditures

Health expenditures in most countries have been rising at faster rate than the per capita income. As government and consumers find health expenditures taking a large share of their income, they look for ways to control the rate of increase; one of these options is to control the supply side (Dunlop and Martins, 1995). Using general tax financing along with direct provisions of services have successfully constrained inflation in the area of health care through the government budget process, where health care has to compete with other public program. Another supply side approach is when services are provided indirectly to allow the payment scheme to moderate inflation and many countries found two such measures to be effective. (World Bank, 2002).

In the past years Tanzania has also been experiencing problems of over expenditure of health services because of the free services offered to the public, up to now the government has not been able to subsidize a reasonable amount of funds to fill the gap in the health care. In the effort of controlling this problem, the cost sharing was introduced which has resulted controversies on the implementation and monitoring of those prepayment schemes.

3.4 Access to Equity and Quality of Health Care

Equity in health care is addressed by the underlying principle that health care services are distributed according to the need and regardless of ability to pay. For any compulsory social program, the amount that people pay in taxes should be proportional to the ability to pay(Dunlop and Martins, 1995). This concept means, the provisions of health services should be universal, comprehensive and of good quality regardless of the health package provided by the financing services. It is the responsibility of the government to ensure that the principle of equity is interpreted into a specific and concrete action through the design and monitoring of the overall health policy (WHO,1998).

Poor rural populations tend to be disadvantaged in their access to health care. This is due partly to the unavailability of health care facilities and the inability of the poor to afford services where user fees are in operation. Studies done in many developing countries have revealed that, cost sharing for the poor and other vulnerable groups

proved failure to access health care due to user fees; on the other hand, results suggested that cost sharing exemption mechanism in ineffeicient (Jutting,2001).

Community Based Health Insurance schemes could make a positive contribution in addressing this imbalance by adopting policies that provide some protection for the poor and making membership accessible to a wider section of the households. For example, exemption mechanisms may provide poor members of the households with scheme membership, paid for through households funds;

Due to the inadequacies in funding and in efficiency, the quality of health care in many health care facilities is very low. This criterion assesses scheme impact on the quality of health care provided to its members and hence to the public. Prepayment schemes could make a significant impact on the quality of health care through their contractual relations with health care providers. For example, there is scope to negotiate for cost and quality, particularly where the insurance scheme has a number of providers from which to choose.

CHAPTER FOUR

4.0 METHODOLOGY

4.1 Description of the study area:

Iringa rural is among the seven districts of the Iringa Region. The district is divided into 9 divisions, 32 wards, 187 villages and 1114 hamlets.

In 2002 the district had a total population of 245,033 of whom 119, 082 (48.6%) were males and 125,951 (51.5%) females and the population growth rate of 3.2% per annum. (National Population Census).

There is no district government hospital in Iringa Rural District. Tosamaganga Mission Hospital which is located in the district serves a population of more than 6,000 people. Also, there are 5 health centers, 4 owned by the government and one owned by NGO institution. There are 47 dispensaries: 36 owned by the government and 11 NGO's which provided both CHF and NHIF services. In Iringa rural district the coverage of registered members for the last year was approximately 3619 and 2641 for CHF and NHIF respectively.

4.2 Study design

A cross sectional descriptive study was conducted in Iringa Rural in the month of June 2005. Both qualitative and quantitative methods were used to

Idodi, Kalenga, Mlowa, Tungamalenga, Nyamahanga, Nzihi, Ihemi and Majengo B.

Sample size determination

The sample size for the three study groups was determined using the following formula.

a) Sample size for the households

$$n = \frac{4p\,(100 - p)}{\varepsilon^2}$$

whereby; n = required sample size

p = proportion of members of households utilizing health services 89 %

ε = Margin of error = 5 %

n = 4 x 0.89 x (1- 0.89) /0.0 5 x 0.05

n = 4 x 0.89 x 0.11 / 0.0025

n = 157

Taking 10% attrition rate it is expected that the sample size was 173.

b) Sample size for the exit patients

$$n = \frac{4p\,(100 - p)}{\varepsilon^2}$$

Whereby; n = required sample size

p = proportion of CHF and NHIF who will seek care 92 %

ε = Margin of error = 5 %

n = 4 x 0.92 x (1- 0.92) /0.0 5 x 0.05

n = 4 x 0.92 x 0.08 / 0.0025

n = 117

Taking 10% attrition rate it is expected that the sample size was 128.

C) Health workers

The health workers were purposefully selected using systematic sampling.

Sampling procedure

a) *Selection of study area*

The selection of the study area was conveniently done. The study ensured that all respondents were within the catchments areas of Iringa Rural where both CHF and NHIF are implemented.

b) Selection of households

Multistage sampling was used in selecting households for structured interviews questionnaires. In each stage, the selection was done using simple random sampling starting from ward level and then villages in the selected wards. A total of 4 wards were selected and in each ward 2 villages were selected. The eight villages selected for the study were Idodi, Kalenga, Mlowa, Nyamahanga, Nzihi, Ihemi, Majengo-B and Tungamalenga.

A total of 191 households were selected for the interview. The selection of the first household was done randomly, and then every third household was selected using a systematic sampling technique. Where there was no respondent in the third household, the fourth household was replaced and interviewed. During the study, heads of households were interviewed, head of households was found to be either a man or woman. In this respect, the household was meant to be a man with one wife or single parent/guardian and children who are less than 18 years of age. In case of polygamous relationships, the different wives were regarded as belonging to different households. The definition conforms to the one that is currently being applied by the CHF program of Igunga district.

c) *Selection of health personnel*

Two health personnel were selected from eight health facilities. The selection of a provider was done based on his job position and responsibilities in the health facility.

d) *Selection of outpatients*

For exit interviews, every second patient who left the hospital after the treatment was interviewed. The patients who were above 15 years of age were asked to respond to the questionnaire by themselves, and those below 15 years of age were assisted by the person who accompained them.

A verbal consent was sought from each respondent before the interview was conducted.

4.4 Data Collection Procedures

(a) Instruments and Training of the Research Assistants:

Two sets of both open and closed questionnaires were used for data collection. An interview guide was used to interview health personnel and a questionnaire was used to interview the households and clients who are CHF and NHIF members respectively. The Swahili version questionnaire was used in the field for collecting data.

Interviewers were recruited from Secondary Schools and the Public Health Institute Iringa. Research assistants were oriented to the questions and format of the questionnaire. A short interview was conducted among themselves to ensure the understanding, sequencing of questions, and estimated time to administer the instrument. Pretest of the instrument was done before the study began to check for consistency, accuracy, coherence and validity of the questions.

(b) Interview Procedure:

CHF and NHIF members who attended the out patient departments were interviewed as they exit the health facility. Exiting consumers (patients) were

approached and informed about the study, and asked to participate. The interviewer started by asking a verbal consent from the participant and the purpose of the study. The interviewee was informed on confidentiality of the information that would be collected before the interview started.

Respondents were interviewed among others about social economic characteristics, utilization of health services, ability to pay for the current use of health services and pass over of the cards. Members of household were also interviewed about frequency of visits in health care facilities, quality of service and availability of the prescribed drugs among other things.

(c) Interview of Providers

In-depth interview was conducted among selected health workers after a verbal consent has been sought; and during the interview information was recorded on the interview guide.

4.5 Data Management and Quality Control:

Data was collected on daily basis as planned. In the course of fieldwork the principal investigator was responsible for guiding and supervising the filling of the questionnaires, and made sure that all interviews were done correctly. Any detected error was brought to the attention of the respective interviewer for correction. The entire properly filled questionnaire was coded and re-

checked by the investigator and thereafter codes were assigned to open ended questions. Where errors could not be detected in the field, the principal investigator helped the research assistants to improve the interview techniques including probing.

Ethical issues

Ethical Clearance was obtained from MUCHS. The research clearance was obtained from Regional Administrative Secretary of Iringa Region, District Executive Director of Iringa Rural, District Medical Officer, ward and village leaders. The District Medical Officer, ward and village leadership informed and communicated to the interviewees. Informed consent was sought from individual interviewees and in-charge of health facilities; and were informed that they had the right to decline if were not ready to be interviewed.

4.6 Data Analysis

Completed questionnaire were sorted and codes were assigned to open ended questions. Data entry, cleaning, validation and analysis were done using Epi Info 6 version.

Associations and strength of relationship between the independent and dependent variables were obtained using statistical tests. 95 % Confidence interval around the proportions will be set using statcalc of EPI 6.

A frequent print out was run to see weather there is any missing information or unreasonable entries, the verification was done by checking one questionnaire after the other.

The observation taken from the in-depth interviews were selected, focused, simplified and transformed into numerical data thereafter the information was compared with quantitative analysis.

5.0 Study Limitation

The results of this study can not be generalized to other districts because sampling was done purposely.

1. Time limit: Time allocated for data collection was not enough for the research assistants to collect more information from the sample size.
2. The study was conducted in the month of June, a harvesting period, therefore most of the CHF members who are peasants, could not be easily found in their respective homes during the day when interviews were carried out.
3. For the exit interviews some of the patients were not able to spend much time for the interview, as a result more days were needed to conduct the interview and data collection.

4. Recall bias: respondents were asked frequency of facility visits of the past 12 months. In this study the respondents were adults and therefore, there are chances that respondents could forget to resport some of the things that were asked. However, extended probing were made to obtain the information.
5. Iringa Rural does not have a district hospital therefore other facilities could not represent a district hospital.

CHAPTER FIVE

5.0 RESULTS

Demographic and Socio-Economic – Demographic Characteristics

A total of 191 head of households and 136 exit patients were interviewed during the study period. Among members of households interviewed 89 (46.6%) were males and 102(53.4%) females; and for the exit patients 75 (55.1 %) were males and 61 (44.9%) females from both CHF and NHIF.

Table 1 indicates that among households members interviewed 70.2%(132) had received formal education up to primary school level, 17.1%(32) had secondary school education, 1.1%(2) post secondary education, and 9.0%(17) had not attended any formal schooling.

For the exit interviewees 76 (55.8%) were members of NHIF and 60 (44.2%) CHF members. Among members of NHIF 32% (25) had received formal education up to primary school, 65.8% (50) had secondary school levels and 1.3% (1) had attended an adult education; about 79.1 %(47) of CHF members had attended the primary education, and only 5.1 %(3) attended secondary education.

Table 1: Social demographic profiles of respondents

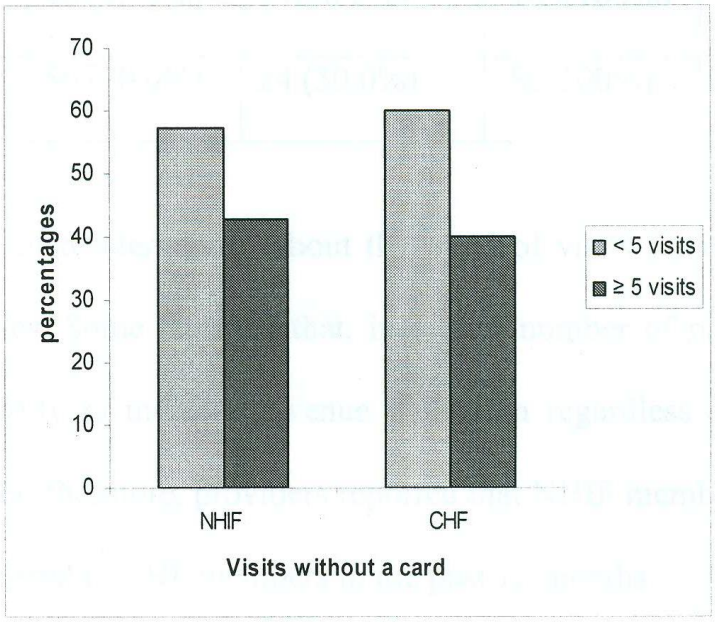
	Households N = 191		NHIF Patients N = 76		CHF Patients N = 60	
	n	**%**	**N**	**%**	**n**	**%**
Age						
≤ 19 years	5	2.6 %	8	10.5%	4	6.7%
20 – 39	116	60.4%	37	51.3%	39	65.0%
40 +	71	37. 0%	29	38.2%	17	28.3%
TOTAL	**191**	**100%**	**74**	**100%**	**60**	**100%**
Gender						
Male	89	46.6%	44	57.9%	31	51.7%
Female	102	53.4%	32	42.1%	29	48.3%
TOTAL	**191**	**100%**	**76**	**100%**	**60**	**100%**
Marital status						
Married	141	82.5%	55	72.4%	41	68.3%
Widow	21	12.3%	2	2.6%	5	8.3%
Divorced	3	1.8%	2	2.6%	3	5.0 %
Cohabited	5	2.9%	7	9.2%	4	6.7 %
Single	1	0.6%	4	5.3%	1	1.7 %
Others			6	7.9%	6	10.0%
TOTAL	**171**	**100%**	**76**	**100%**	**60**	**100%**
Education status						
No formal education	17	9.0 %	-		9	15.3%
Primary education	132	70.2%	25	32%	47	79.1%
Secondary education	32	17.1%	32	42.1%	3	5.1%
Post – Sec education	2	1.1%	18	23.7%	-	
Adult education	5	2.6%	1	1.3%	-	
TOTAL	**188**	**100%**	**76**	**100%**	**59**	**100%**

Utilization of membership cards

A total of 136 patients were interviewed during exit interviews. Among members interviewed, some did not bring with them membership cards when visited the health facilities, however, they were treated as members of CHF and NHIF.

Figure 1 shows that, about 60.0% (3) and 57.1% (4) respondents of CHF and NHIF respectivelty reported to have had visited less than five times without having membership cards. On the other hand, members who visited more than five times in the facilities without having cards reported by 42.9%(3) and 40.0%(2) for NHIF and CHF respectively.

Figure 1: Use of cards among NHIF and CHF members when visiting health facilities (N = 117)



Number of visits to the health facilities

Respondents were asked about the number of visits in the past 12 months prior to the interview, and reasons prompted them to seek care. Table 2 shows the number of visits made by members of the households in the health facilities.

Table 2 shows that about 56.2% (59) of members of the household who were belonging to either CHF or NHIF reported to visit health facilities more frequently compared to non- members of the scheme by 30% (24).

Table 2: Number of visits for members of Households in the facility

	Households		
	1 – 5 visits	**> 5 visits**	**TOTAL**
Members	46 (43.8%)	59(56.2%)	105(100%)
Non members	56 (70.0%)	24 (30.0%)	80(100%)

Health providers were also interviewed about the trend of visits for outpatients in their respective facilities. Some reported that, increased number of patient's visits enables the health facility to increase revenue collection regardless of the health problem of the client. Furthermore, providers reported that NHIF members had more numbers of visits compared to CHF members in the past 12 months.

The respondents were also asked about the effect of distance on their health seeking behaviour. Table 3 shows the relationship between distance to the health facility and number of visits made by the respondents.

Table 3: Number of visits made by members of CHF, NHIF and Households respondents with distance

	No. of visits in health facilities in the last 12 months					
	CHF		**NHIF**		**Households**	
Distance	**< 5**	**5 +**	**< 5**	**5 +**	**< 5**	**5 +**
< 5 km	27(69.2%)	12(30.8 %)	21(67.7%)	10(32.3%)	24(54.5%)	20(45.5%)
> 5 km	7(87.5%)	1 (12.5%)	25(64.1%)	14 (35.9%)	33(22.3%)	115(77.7%)
TOTAL	**34**	**13**	**46**	**24**	**47**	**135**

Table 3 indicates that, about 30.8 % (12), 32.3 %(10) and 45.5 % (20) of CHF, NHIF and Households members respectively, who lived in a distance of less than 5 kilometers reported to have had visited health facilities more than 5 times in the last 12 months prior to the interview. The table also shows that those who lived far from the facilities had visited health facility more oftenly regardless of distance they had to travel, except 12.5%(1) of CHF respondents, who reported to have not sought care more oftenly.

Ability to Pay

Table 4(a) indicates that, about 55.8% (24) and 21.9 %(16) of members of CHF and NHIF respectively reported that they would not be able to pay for their current health facility visit if they were not members of the schemes. For the households members about 88.5 %(85) whom were in either CHF or NHIF schemes were also reported that, they would not afford to pay for the health services whenever they visited the facility.

Table 4(a): Reported ability to pay for CHF and NHIF if they were not members

	Able to pay	**Not able to pay**	**Total**
CHF	19(44.2%)	24(55.8%)	* 43 (100%)
NHIF	57(78.1%)	16(21. 9%)	** 73 (100%)

* Missing information - 17 respondents of CHF
** Missing information - 3 respondents of NHIF

Table 4(b): Reported ability to pay for members of households

	Household		
	Able to pay	**Not able to pay**	**Total**
Members	11 (11. 5%)	85(88.5%)	96 (100%)
Non-members	40 (43.0%)	53(57.0%)	93 (100%)

Respondents in both households and exit patients interviews also reported some of the reasons that would hinder them to pay for their health care. These included; low income and higher charges by health facilities.

Perceived Quality of Services

Respondents were asked if they were satisfied with the quality of services provided in the health facilities. Table 5 shows that, about 30.7 % (23) of NHIF members reported to have not been satisfied with the service provided. About 10.6 % (5) of members of CHF reported not to be satisfied with services provided.

Among reasons given by respondents were:-

1. The amount of money they contributed does not match with the quality of services they received.
2. Drugs are not always available in the facilities
3. Not all illnesses are covered in the health benefit package.

Table 5: Satisfaction of health services received among members of NHIF and CHF

	Health Services		
	Satisfied	**Not satisfied**	**TOTAL**
CHF	42(89.4%)	5 (10.6%)	47(100%)
NHIF	52(69.3 %)	23(30.7%)	75(100%)

* *Missing information - 13 respondents of CHF*
** *Missing information - 1 respondents of NHIF*

Benefit of Prepayment Scheme to Providers

Health providers were interviewed on their attitude regarding the benefit package of prepayment schemes. Most of the providers (6) interviewed appreciated the introduction of CHF and NHIF and reported presence of an improvement in the quality of care in terms of availability of drugs and other medical devices.

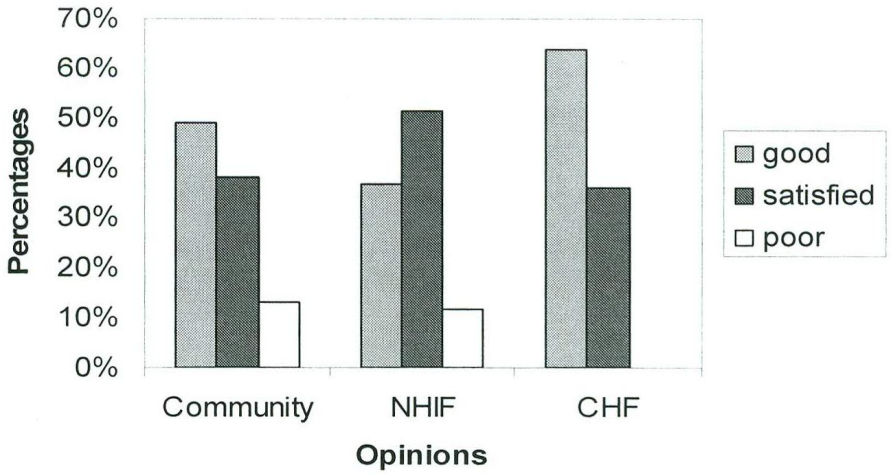
"*I benefit out of these schemes because drugs are now available and the revenue collected through CHF has contributed to meet payments for things such as electricity, water, and payment of incentives to some workers*" (Interviewed; HW, Nzihi, 28 June 2005).

Patients and households opinions on attitude of health workers in the facilities

Figure 2 shows the distribution of patients and households and their opinion on the attitudes of health workers towards patients under prepayment schemes and those paying user fees. About 36.8% (28) NHIF and 63.5% (30) of CHF reported an improved performance of health workers and 11.8 %(9) of NHIF reported poor performance after introduction of prepayment schemes.

In addition, 38% (28) of members of the households 51.8% (39) NHIF and 36.2% (17) CHF respondents reported to have been satisfied with the performance of health workers in the facilities.

Figure 2: Opinion of patients and households on attitude of health workers (N = 151)



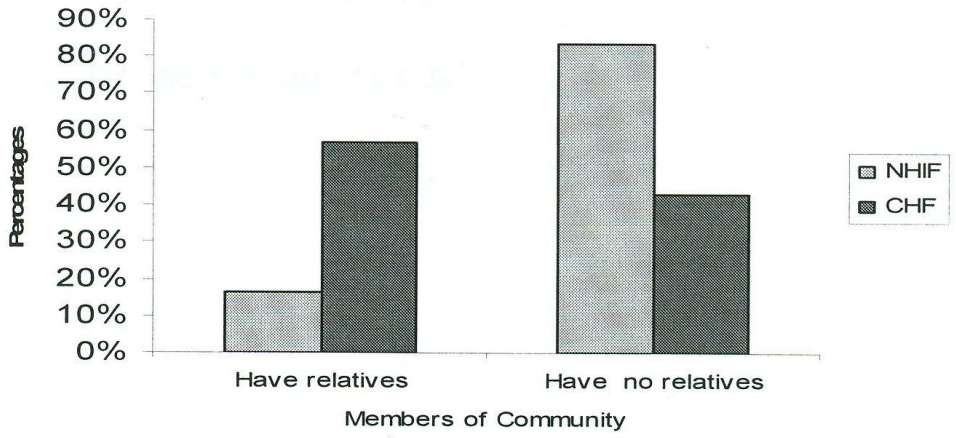
Use of membership cards by Non-members

In 191 households' survey, 91 respondents were non members of either NHIF or CHF. Table 9 shows the use of NHIF and CHF cards by non members. Among respondents interviewed 75.5% (6) females and 25.0% (2) who were members of households interviewed reported to have ever used cards of their relatives and friends. About 55.4% (46) of women and 44.6% (37) of men reported to have had ever used cards of their relatives or friends for seeking health care. Among those who were not members, about 65.5% (19) and 17.5% (5) reported to benefit from having friends from CHF and NHIF respectively. (tables not shown).

Figure 3 shows the responses of members of the households who were not members of CHF or NHIF but had relatives and friends in prepayment schemes.

However, about 16.3%(15) and 57.0%(53) of households members had relatives who were either NHIF or CHF members respectively. Among 83.3% (10) of household respondents with relatives in the prepayment scheme reported to have used their cards in the last 12 months.

Figure 3: Non-members with relatives and friends in prepayment schemes (N = 78)



Subsequently, health providers were asked mechanism of monitoring the use of cards among CHF and NHIF members, none of the providers could explain exactly what was done. More than four health workers agreed that they had seen several patients who were not members of CHF nor NHIF who used either relative's or friend's membership cards to seek care.

Also the providers were interviewed about the measures taken when passing over the cards has been realized.

One of the providers said "*I experience the passing over the cards from one person to the other, in all scenarios patients gave explanation as to why cards were used.*

(Interview; HW, Mlowa, 30 June 2005).

Apart from the patients being using relative's cards, they had reasons which prompted them to use those cards .Among other reasons were;

1) The persons were registered but do not have cards;
2) Parents tend to pass over cards to their children especially those under five because they do not have cards;
3) Misplacement or lost of cards".

CHAPTER SIX

DISCUSSION

Community Health Fund and National Health Insurance schemes were introduced in order to improve the quality of services. The initiation of these financing options came after it was realized that, not all the population could afford to pay user fees during the time of seeking health care. This study is focused on exploring if the use of card in the social insurance scheme has addresses the issue of misuse of cards in Iringa rural district. Different aspects of misuse of cards are explored in this study as discussed below;

Misuse of Cards: Utilization of membership cards

The results of this study conform to economic theories of risk and uncertainty. Misuse of membership cards is one of the major problems in health insurance. Some of results into moral hazard that has affected insurance market but is a particularly serious problem for health care insurance (Smith, 1992). Consumers who are insured have incentives to misuse their cards over-consume health care by demanding treatments which they would not choose if they were directly paying out of pocket.

Apart from misuse of cards, some members would visit the facility without a card. This study indicates that, some registered members did not have cards when visited a

health facility. And on the other hand, although CHF cards were difficult to be monitored by health providers, there were no efforts initiated by them to refer records available to be able to identify proper members entitled for the service. Moreover, health providers reported to have had attended patients without cards because they are known to them, as they could either be from the households whom majority live or due to their occupation status.

Although children under five years of age are supposed to be exempted to pay for the health services, providers have been requesting cards for all children of this age group when they visit the health facility. Members of NHIF scheme failed to either show cards for their children nor paying extra cost because they knew that monthly contribution deducted from their salary included their children. This irregularity contradicts the health policy which stipulates free health services for vulnerable groups, children under 5 years inclusive (National Health Policy, 2003).

Misuse of Cards: Frequency of visits in the health facilities

It is likely that, members of health insurance schemes tend to seek care than those who pay from out of pocket (MOH,2002). This fact supports the results obtained in this study, where members of either CHF or NHIF from household's members visited the health facilities more compared to non-members. However, NHIF members reported to have visited facilities more than CHF members. These could be

among eligible civil servants who did not want to join the scheme at the first beginning. This implies that such people might have contributed to the scheme mandatorily and therefore, are prompted to visit in a facility to utilize services unnecessarily. It is expected that the normal range of visits to health facility in a year could be 5 times or less.

Other factors which may have influenced the increase of number of visit or utilization of health services are age, distance and perceived quality of services individuals receive (Mallya, 2003).

It is obviously that, distance influences number of visits among a population; which means for those who stay far away from a facility can not visit a the facilities often. The relationship between the age and frequent of visits in the health facility shows that, the middle age and adult respondents were more likely to visit the health facilities compared to the young and elderly people. This might be due to prevalence of diseases including HIV/AIDS endemic and the distance from the village to the health facility. Among reasons prompted then to visit the facilities were; seeking for consultations and treatment.

Health providers are also indirectly encouraging misuse of cards. They know that the costs of treatment are covered by insurance so the temptation is to over-treat and

over-prescribe medicines for their patients. Health providers reported that the increases of number of visits increase the revenue collection of the health facility. There is a lack of necessary data which bring difficulties in seting up schemes which results in poor reports. However, it has been found that, there is a tendency of providers to over-charge some patients to abuse the NHIF services (Humba,2005).

Misuse of Cards: Ability to pay for health services

Several factors have been found to influence members' ability to pay for health services if they were not members of either CHF or NHIF. Among these factors are economic status, cost of care, and availability of drugs and poor quality of services. (Shijah,1996).

The study also indicates that about 88.5 % of heads of household who were either members of NHIF or CHF reported not to be able to afford to pay for their treatment when they visited the facilities. This report implies that, members tend to misuse their cards and over-consume health care because they were not directly paying from their pockets.

De Ferranti (1985), Egunjobin (1983) and Schwartz et al (1988) argued that cost of health services has no major effect on willingness and ability to pay. This is contrary to the view presented by other researchers like Booth et al (1995) and Gilson (1997)

who affirm that cost is an important determinant of people's ability and willingness to pay for health services.

Prior the implementation of user fee in Tanzania, opinion polls revealed that 87% of respondents agreed to pay for services provided they are assured good services, seventy six percents also agreed that " if good services is provided people will give the little they have to pay for treatment'" (Mujinja and Mabala, 1992). So for the CHF and NHIF schemes, if the services were satisfied they would be no complains.

Patients and Households opinions on attitude of health provider in the facilities

The consumer of health services expects smooth, sympathetic interaction that is both informative and educative about the problem one has (MOH, 1997). This study showed that 11.8% of NHIF and 13.0% of households members reported poor performance of health services as expected, after the introduction on pre-payment schemes. The performance and quality of health service take into account the interaction between the provider and consumer.

Msamanga et al (1996) found out that patients were satisfied because they were informed on their problem and received adequate instructions on their treatment. But, in this study, respondents reported reasons for them not to be satisfied with services as the behavior of health personnel including unfriendly attitudes and harsh language during the time of issuing medication.

Satisfaction of quality of health services provided

Consumer theory assumes that consumers know what is the best for themselves that means they can make choices which will maximize their total satisfaction. Where assumption is not fulfilled wrong then markets will not automatically produce efficient results. So this implies that, members of NHIF were not satisfied with health services received, as a result moral hazard is observed.

In this study a high level of satisfaction has been reported to men from CHF and members of the households who were interviewed. The patients considered the duration of consultation, availability of drugs as factors that would influence the utilization of health care from a certain health facility. On the other hand, about 30.7 % of NHIF clients reported not to be satisfied with the services they receive because the amount of money they contributed do not match with the quality of services provided. There has been complains from most NHIF respondents on the health benefit package offered; NHIF respondents reported that not all illnesses could be treated using the card. However, this problem has not been reported by CHF members despite of Tsh.5000 which they contribute.

Msamanga et al, (1996) found that 25% of patients got their drugs, 70% perceived reported short waiting time, 97% reported adequate consultation time while 91% reported adequate explanation. In the other hand it can be emphasized that

consumers satisfaction is related to a large extent to aspects which are not strictly medical or technical; rude staff behavior, long waiting time and working hours that are not convenient to clients coupled with contradictory messages from different providers that increase anxiety and lack of confidentiality (Leberghe et al,1993).

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

The findings from the study allow the following conclusion to be drawn

1. The introduction of pre-payment schemes lack control and monitoring system where by there could be a misuse of cards and resources.
2. The CHF cards has deficit and allow everybody to use the card.
3. Regardless the presence of members in the household, the same can is passed over to those who are not entitled for the service
4. The health providers do not know the concept of social insurance that is not meant for revenue collection only
5. Although the schemes are in place, there are still complains
6. There is irregularities and waste of resources in the prepayment schemes because of lack of monitoring.

RECOMMENDATIONS

1. There should be a proper monitoring system of the use of cards in all health facilities
2. The views and comments expressed by people should be used by policy makers and health service managers to initiate a process of change with in turn will improve health delivery system in the country

Further Research

The findings of this study point out possible areas for further research. More research should be carried out in the following areas.

1. Best way to strengthen monitoring and control of misuse of cards
2. Explore ways to reduce moral hazard

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