

## GROUP PREMIUMS IN MICRO HEALTH INSURANCE EXPERIENCES FROM TANZANIA

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**Abstract**

**Objective:** The main objective was to assess how group premiums can help poor people in the informal economy prepay for health care services.

**Methods:** A comparative approach was adopted to study four groups of informal economy operators (cobblers, welders, carpenters, small scale market retailers) focusing on a method of prepayment which could help them access health care services. Two groups with a total of 714 operators were organized to prepay for health care services through a group premium, while the other two groups with a total of 702 operators were not organized to prepay through this approach. They prepaid through individual premium, each operator paying from his or her sources. Data on the four groups which lived in the same city was collected through a questionnaire and focus group discussions. Data collected was focused on health problems, health seeking behaviour and payment for health care services. Training of all the groups on prepaid health care financing based on individual based premium payment and group based premium payment was done. Groups were then free to choose which method to use in prepaying for health care. Prepayment through the two methods was then observed over a period of three years. Trends of membership attrition and retention were documented for both approaches.

**Results:** Data collected showed that the four groups were similar in many respects. These similarities included levels of education, housing, and social services such as water supplies, health problems, family size and health seeking behaviour. At the end of a period of three years 76% of the members from the two groups who chose group premium payment were still members of the prepayment health scheme and were receiving health care. For the two groups which opted for individual premium payment only 15% of their members were still receiving health care services at the end of three years.

**Conclusion:** Group premium is a useful tool in improving accessibility to health care services in the poorer segments of the population especially the informal economy operators

**Key words:** Prepayment for Health Care, Health Microfinance Insurance Scheme, Group Premiums.

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**Introduction:**

Until the early 1990's health care services in Tanzania were paid for by the government (1, 2). Out of pocket payments were common for those who opted to receive care in the private sector (3). In the mid 1990's, however, health sector reforms were effected (4), these targeted among others health care financing. Within health care financing, many changes were introduced, including cost sharing, the establishment of community health funds, enactment of a National Health Insurance Fund (NHIF), and the re-introduction of private for profit health care services(5). Within cost sharing, care seekers attending government health care services were required to pay a small fee at registration and a percentage of the cost of drugs prescribed. Community Health Funds were established mainly in rural areas. Under these arrangements consumers of health care prepaid at fixed rates and received services from a Government health care services unit or any other accredited facility (6). The National Health Insurance Fund is a compulsory scheme designed for civil servants only. It is financed through funds deducted from salaries and matched at the same level by the government.

The private for profit, arrangement mentioned above operates on a cash and carry basis(7).

The post Health reform period in Tanzania has been characterized by cash payments at all health care providing units, the government ones included. There is a provision for exemptions for certain categories of people and conditions but many inadequacies have been recorded on this arrangement (8).

Within the process of reforms, accessibility to health care services has been impaired. The poorer families, the majority of who are in the informal economy have been affected most. This group of people cannot pay cash and carry in the private sector, nor can they pay cost sharing. Their counterparts in the rural areas have been well served by the community Health Funds option. The informal economy operators, the majority of whom live in urban areas, have had reduced access in much of the post reform period in Tanzania (9).

In the late 1990s, a mutual health scheme known as UMASIDA(Umoja wa Matibabu sekta Isiyo rasmi Dar-es-Salaam) was established in Tanzania to minimize the problem of accessibility to health care services by the informal economy operators. This mutual scheme is based on a prepayment of a premium of Tshs 1,500 ( US \$ 1.3) (10). This premium is adequate for a member, a spouse and four children below the age eighteen. The premium is paid directly by an individual titular member or through a common group. The later method is preferred because it minimizes adverse selection. Beneficiaries also pay a co-payment of Tshs 500 (=us \$.50) per episode, this minimizes moral hazards(overusage). For a premium of Tshs 1,500, members receive all needed outpatient care, specified Laboratory tests and generic prescriptions. Dentures, artificial limbs and hearing aids are excluded from the

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package of benefits. All care is provided at dispensaries or health centers owned by UMASIDA. For difficult cases, referral is to government health care units (11).

Overtime the numbers of beneficiaries has fluctuated. A recurring problem is the non-payment of premiums. Lack of or low incomes have been cited as the main reason for failing to pay premiums.

This article will document an attempt to facilitate premiums payment in order to increase and sustain accessibility to health care services by the informal economy operators. In this attempt two methods of paying premiums were fielded and followed over a period of three years. This methods are (1) Individual based premiums payment and (2) Group based premium payment.

In the individual based premium the titular member prepays the agreed premium. In this case it was 1.3 US\$ per month from his/her own sources. For the group premium, the group in which the titular member belongs pays one lump sum for all its beneficiaries monthly. It is worth noting at this moment that the informal economy in Tanzania is organized in groups of artisans, carpenters, cobblers or small scale market retailers working at one place, engaged mainly in the same activity. The groups have the following characteristics: periodically and democratically elected leaders, guidance by at most a constitution and some are registered by the government. The majority have a group fund into which each group member contributes a token amount of cash daily or weekly. This fund is used to offset group based costs such as water bills, energy bills and security. They also use this fund to offer some kind of social protection to members who need such support at grief periods e.g. to offset burial costs etc.

In the UMASIDA Mutual Scheme some beneficiaries chose the individual premium payment method -each member paying from own sources. Others chose the group based premium payment method. This article illustrates the experiences from Tanzania on the two methods. Lessons will be derived from a comparison of membership retention and so access to health care services based on the two methods of premium payment.

## Methodology

Having secured a joint ethical clearance from the UMASIDA Board of directors and the respective groups, a comparative approach was adopted to study four groups of informal economy operators (cobblers, carpenters, welders and small scale market retailers) in an attempt to find a method which retains beneficiaries for a longer time with minimal attrition/dropout. Such method would help informal economy operators receive health care services sustainably for a longer period. Purposive sampling of four groups was done. Two of these were chosen from those who had opted for group based premium payment. Two others were chosen from those who had opted for individual based payment of premiums.

This purposive sampling was preceded by a thorough analysis of all of UMASIDA'S groups who had indicated a

choice of either group or individual based premium payments. Analysis of the groups was based on several control factors to enable one to draw objective conclusions at the end of the exercise.

The analysis included the following characteristics, which are important and can effect decisions in risk sharing and health related matters: size of the groups, sex and ages, residential location, education levels, illnesses suffered, use of health care services (other than formal care i.e. Government or private), costs incurred in treating last episode suffered. These factors were chosen because they are known to influence health care seeking behaviour and general access to health care services.

After the analysis, the four groups which emerged with minimal differences in terms of these characteristics were then, with participation of potential beneficiaries, slotted for group or individual based payments. All groups were equally prepared to receive micro health insurance. Preparation of the four groups included establishments of mutual cells, training and orientation in the use identity cards, the package of benefits and where to receive them, referral links, groups participation in the mutual schemes management, premium payment, moral hazards, adverse selection and other dos and don'ts of a micro insurance scheme.

## Results

### Socio – Economic characteristics

For the four groups the majority of beneficiaries were between the ages of 30 and 40 years. In terms of composition 60% (850) were female. These proportions are typical of the informal sector economy in Tanzania where the majority are women.

More than 80% (1133) of both groups reside in periurban and unplanned areas of the city. They either live in mud or wattle houses or in rented rooms without electricity and water. Most rooms are occupied by adults and children up to five persons per room. These residential areas are congested, unhygienic and crime ridden.

### Income and Education

In the four groups, incomes were lower than one dollar (US) per day for 81% (1145) of the members, which is below the poverty line in Tanzania. The implications of such low income include poor nutrition, clothing, housing, and access to health care especially under a cost sharing policy. The education levels were also low. 78% (1104) of participants in both groups had completed primary education. While 15% (212) had completed only four years of primary education or less.

**Nature of health problems**

In term of social services, both groups were under served. Eighteen percent (255) used water from a shallow well, 19.8% (280) got their water supplies from temporary rivers, and 62.1% got their water supplies from public stand pipes. The nature of water supplies has a direct link to health problems. Under such circumstances the pressure to seek out health care services and so joining mutual schemes may be increased.

Participants in both groups besides HIV/AIDS, suffered mainly bacterial, viral or parasitic diseases (malaria). Water borne diseases were most prominent affecting 43% (608) of members. Nutritional disorders, mainly marasmus, stunting and underweight were the second most frequent health problems affecting 37% (524).

**Health care facilities**

In an attempt to deepen understanding of these groups, nature of health care services sought was also analyzed. Results show that 88.4% (1253) of them used government health care services. These services are comparatively poorer in quality and quantity. They don't have adequate drugs, diagnostic equipment and the majority of its workers are demoralized. Members nonetheless resorted to these units because they could not afford to pay for any other. Because of lack of drugs at these units, 77% (1090) of the 88.41% who visited government health care units resorted to over the counter drugs.

**Cost of care**

Cost of care in the last episode suffered was studied. This was done to give an indication on how much paying for care had become a burden in relation to income. 68% (963) of group members had paid three times their daily income for medicines alone.

**Willingness to join the UMASIDA mutual scheme**

Having analysed the socio – economic characteristics, health problems and health care services used, the groups' willingness to join the UMASIDA mutual scheme was studied. Altogether 83.8% (1187) in both groups indicated willingness to join the mutual on a prepayment basis, at a rate Tshs 1,500 (US \$ 1.5) per month per a family of six and payment Tshs 500 (US \$0.5) per episode.

Furthermore having indicated willingness to join the scheme, groups were prepared to receive services. Their preparations included the following:

*Establishment of Mutual Cells:* Mutual cells were established as operational units. The mutual cell consists of 10 families defined by the following factors

- (b) Administrative location e.g. same street or ward
- (c) Common occupation e.g. carpentry.

These factors make it easy for beneficiaries to encourage each other to pay premiums or act as pressure groups for group leaders to pay premiums.

**Training workshops and an identification system**

Training workshops were then held to deepen the understanding of beneficiaries on the scheme. Health care workers were also trained on do and don'ts of the mutual scheme with an emphasis on respecting the beneficiaries, good public relations, rational prescribing, and adherence to generic prescriptions. The importance of record keeping was a key issue in this training. A computerized identification system with picture identity cards was established. Photo identity was provided to each family member ready for services consumption.

**Joining the mutual scheme**

All the four groups were then allowed to join the mutual scheme. Agreement was reached through a participatory mechanism which stated that each member or group would pay their premium at a defined location for two months before receiving services. In the beginning, the beneficiary numbers from all groups were high. Differences in terms of numbers of members emerged overtime. The dropout rates for members paying as individuals (individual based premium method) were significantly higher. This happened despite the fact that both groups were being treated by a similar staff and in same health care units.

The percentage trends of members from the individual payment method compared to the group based premium method are indicated in figure 1 below.

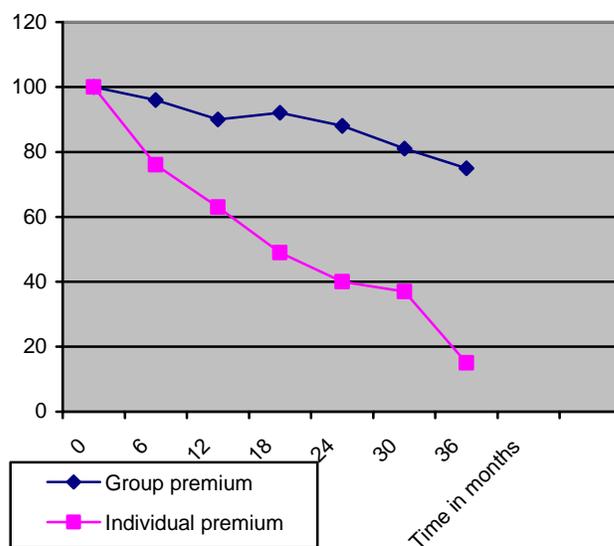


Figure 1: Trends of Attrition based on Group Premiums or Individual Premiums.

As the line graph above shows the attrition/dropout rate for the individual payment method is much higher than the group based payment method.

### Discussion

For the informal economy operators, risks faced such as illness are not different from those faced by others. Their vulnerability, however, is higher because they're poor. Ill health risk and such others have a special significance on their lives because they lock the operators in the vicious circle of poverty. Prepayment for health care as a form of micro-insurance is one form of the risk management strategies. Up until now insurance as a prepaid risk managing instrument was never considered an option for the poor-and especially informal sector operators. For one, the informal economy operators were considered too poor to be able to pay for insurance and for others, they were considered uninsurable given the variety of risks they face. However, recent developments in Tanzania and elsewhere have shown that not only can the informal economy operators contribute towards their health insurance but that they're able to insure themselves provided they participate fully in these arrangements and an appropriate method is adopted.

Group based premium payment for micro insurance is slowly picking up in Tanzania. Given the rapid growth of microfinance institutions in the country the group approach has a promising future.

For the informal economy operators there is a constant exposure to the possibility of falling ill. As the analysis above showed they live in a life of deprivation, unhygienic conditions, nutritional disorders and social tension. For them, illness and so a day out of work is a cause of immediate impoverishment and a source of sustained inequality in all its aspects. When illness strikes they forgo income but also must borrow or sell assets to meet hospitalization costs. Attempts by Microfinance Institutions to alleviate poverty among these operators are not succeeding because often the credits received are diverted to hospitalization costs. Innovative prepayment strategies to enable these groups meet health care costs should be a part and parcel of any comprehensive plan to overcome poverty and so initiate equity.

The need for an appropriate organization can not be overemphasized. In this case UMASIDA acted as the nodal agency-the organisation. It organized informal economy operators as an umbrella organization. Some of its successes are attributable to having intimate knowledge of the priority needs of the groups in which it worked and the trust of the members. It has also received support from the government in terms of tax exemptions.

UMASIDA's roles have been multiple and essential for the survival of the scheme. It has lowered transaction costs, has constantly negotiated with members on the contents of services required and has supplied health care. Besides, its organizational set up provides for members to participate fully in all decisions made and their implementation e.g.

mobilisation of other groups. Furthermore UMASIDA's necessity has been emphasized by the following observation. "In many poor regions of the world, and particularly for many poor people, informal institutions such as community networks are the only ones that are relevant, because access to formal ones is relatively scarce".

The necessity for these informal institutions arises from the fact that in several low and middle income countries, the government has been unable to provide health insurance to many population segments, most notably those in the informal economy or in rural areas. However, the experience of all rich countries, that implement universal coverage proves that insurance whatever its form is the only alternative to full public provision of services. Innovation is therefore, needed to ensure even those with unreliable and fluctuating incomes are brought on board. The group based premium payment method is just a beginning in this direction.

The findings above indicate that the poorer segments of the population, particularly those in the informal sector, suffer diseases that are associated with poverty (12). These diseases are mainly waterborne, intestinal parasites, malnutrition and Malaria. HIV/AIDS is also a major problem, as indicated by rising rates of tuberculosis. The majority 83% (1175) live in periurban areas where housing is poor and water supplies are inadequate and contaminated. Social inequity underlies this situation(13).

Health Sector reforms have negatively affected access to health care services and equity for the informal sector operators (14) because reforms introduced cash payment at all points where services are provided. At all the government health care units now there is cost sharing. In the private health care sector costs are high and beyond reach by the poor in the informal sector. Within this sector, over the counter prescriptions and self-medication are the norm. These have the danger of masking illness and encouraging development of higher opportunity costs as a factor in poverty and socio economic inequality.

For the informal sector in Tanzania, prepayment for health care services is rather new. Despite its obvious advantages, potential members, treat it with suspicion because the concept of risk sharing is minimally understood. Fairly large numbers of beneficiaries from the individual payment method wanted to reclaim their premiums if they were not sick during the term, and many chose not to renew increasing the drop out rates.

By use of mutual cell, adverse selection was minimized. Through these mutuals, those who were well and those who were sick joined the mutual scheme together. As the moral hazard was high for both groups, a Tshs. 500 co-payment per episode was introduced. Training the health service providers was necessary because they were also not conversant with prepayment scheme. This problem was more pronounced in the National Health Insurance fund. In these funds, beneficiaries received care from government health care units. At these units health staff treated with contempt patients who came in with prepayment identity cards. Patients who paid cash for cost sharing - were

preferred. There are many reasons to explain this behaviour. Studies done elsewhere show that, the hospitals benefit when patients pay in cash (15).

For the UMASIDA mutual scheme this problem, being treated with contempt was not experienced because, UMASIDA established its own health care units and employed its own staff. Costs were controlled by insisting on generic prescription and restricting all referrals to public hospitals.

## Conclusion

Inequity in health care services in the developing countries has been exaggerated by health sector reforms. The poorer segments of the population especially those in the informal sector have been affected negatively by reforms in health care financing that requires out of pocket payments at points of receiving care. To minimize this problem, alternative or complementary approaches of health financing are needed. In the work presented above, one approach of health care financing -*group based premium*- has been documented.

This article shows that for the poorer segments of the population (informal economy) prepayment for health care services on an individual basis is problematic. This segment of the population because of low incomes in the midst of many unmet needs is opting to be risk takers than risk sharing.

As figure one above shows clearly, prepayment among the poor is possible through *group based premium payment arrangements*. In this approach members pay small instalments daily or weekly through their groups. Because the instalments are small other daily priority needs are not compromised and so the scheme becomes viable and sustainable.

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