Knowledge and Uptake of Community-Based Health Insurance Scheme among Residents of Olowora, Lagos

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ABSTRACT
Background and Objective: The informal sector population in developing nations has low health coverage from Community Based Health Insurance (CBHI) and problems such as limited awareness about the potential impact of prepayment health financing and the limited resources to finance health care can impede success. This study assessed the community based health insurance scheme uptake and determinants in Olowora, Lagos State.

Methods: This was a descriptive cross sectional study carried out in July 2010 in all households of 12 out of 41 streets in Olowora, by multistage sampling. Four hundred and sixteen interviewer-administered questionnaires were completed and returned. Analysis was by Epi-info version 3.5.1 software.

Results: Although 75.5% of respondents were aware of the Community Health Insurance scheme at Olowora, just about half (49.5%) of them had good knowledge of the scheme. A substantial proportion (44.2%) of respondents did not believe in contributing money for illness yet to come, and majority (72.3%) of such respondents prefers payment for health care when ill. While about half (53%) of respondents had enrolled into the community health insurance scheme, 45.6% of those who had not enrolled were not aware of the scheme. Lack of money was the main reason (51.5%) why some enrollees had defaulted.

Conclusion: The study identified information gaps and poor understanding of the scheme as well as poverty as factors that have negatively affected uptake. The scheme management has to re-evaluate its sensitization programmes, and also strengthen marketing strategies with special emphasis on the poor.

Key words: Health Insurance Scheme, uptake, enrollee, Lagos.

INTRODUCTION
The World Health Organization (WHO) estimates that each year, about 178 million people cannot pay for their health care and many low income countries have not been able to meet the basic health care needs of their people, especially those in the rural areas. A very high proportion of the primary health care facilities serve only about 5-10% of their potential load. How to finance and provide health care for the more than 1.3 billion rural poor and informal sector workers in low- and middle-income countries is one of the greatest challenges facing the international development community. Many poor people lack access to effective and affordable drugs and to surgery and other interventions, largely because of weaknesses in the financing and delivery of health care. Although 93% of the global burden of disease falls on 84% of the world’s poor, only 11% of global health spending (US$ 2800 billion) occurs in low- and middle-income countries.

The difficulties often encountered in out-of-pocket expenses has compelled introduction of prepaid health insurance in many developing countries. Therefore, in a bid to improve the health status of Nigerians, the government started a comprehensive health care financing strategy, including the fast tracking of the National Health Insurance Scheme (NHIS) in 2005, hoping to enhance community participation in providing and financing health services.

Community-based health insurance schemes (CBHIS) are typically targeted at poorer populations living in communities, in which they are involved in defining contribution level and collecting mechanisms, defining the content of the benefit package, and or allocating the schemes’ financial resources. A recent survey of literature on community-based pre-payment schemes highlights that population coverage by these schemes has remained relatively low and that the most vulnerable households are not currently incorporated. Thus, most of these
schemes have small risk pools and limited cross-subsidies (from the healthy to the ill and from the wealthy to the poor). Another recent critical assessment of such schemes highlights the importance of better understanding how they interact with other elements of the health care financing system.\textsuperscript{4}

Based on the Nigerian national health insurance scheme (NHIS) guidelines, and some other studies, the community pre-payment not-for profit scheme has been proposed to be most relevant in Nigeria and in other “low income countries” because it enables the members to decide on how and when to pay their premiums so that the scheme is responsive to their needs.\textsuperscript{5,6}

The use of community prepayment schemes has drawn lot of interest in international health policy debates.\textsuperscript{7} The fact that in many schemes communities participate in the process of defining the benefit package to be covered in advance (what to buy, in what form, and what to exclude) is a strength of CBHI.\textsuperscript{8} Despite the appealing attributes of CBHI schemes, several operational difficulties have limited the success of several schemes.\textsuperscript{9}

Many of the shortcomings of CBHI relate to problems with scheme design, weak management and a lack of institutional capacity.\textsuperscript{8,10,11} In Nigeria, such challenges could include scarcity of resources, limited experience with insurance mechanisms to pool and manage risk, and inefficient revenue collection, pooling and resource allocation and purchasing\textsuperscript{12}. Poor access to health services and the predominant use of out of pocket payments and user fees as major forms of health financing has further worsened the health status of Nigerians making it difficult for the poor to get good healthcare and further impoverishing the people.\textsuperscript{12}

This necessitated the creation of the Nigerian Health Insurance Scheme which is currently being implemented and was established to improve the health of Nigerians at an affordable cost. The benefit packages offered include basic outpatient and inpatient care, maternal and child health services etc though this only covers the formal sector. However the NHIS incorporates a community based financing scheme in order to take care of the informal sector.\textsuperscript{6}

To design a benefit package which is affordable, equitable and sustainable that will satisfy a varied number of persons has proven to be challenging because most CBHI schemes offer across board one benefit package, which mostly comprises curative services, generic drugs and uncomplicated deliveries.\textsuperscript{13} This is because most insurers are not willing to take costly risks for small schemes largely because it endangers solvency when the number of claims rise.\textsuperscript{14} Moreover, to increase the benefit package will lead to an increase in the premium being paid.

It is very worrisome that most States and Local Governments have not been able to embrace the scheme. Even if they eventually do, 75\% of the people in Nigeria belong to the informal sector and need to have health insurance. These are the people that can be included in the Community Based Health Insurance (CBHI) and problems such as weak managements, poor quality government health services and the limited resources that local population can mobilize to finance health care can impede success. In addition, the poorest groups are unlikely to become members of CBHIs because they are generally unable to afford the premiums.\textsuperscript{16}

The World Health Organization also estimates that yearly, 104 million people are impoverished in order to pay for medical treatment and most households in Nigeria have a considerable large family size and a per capita income less than the average monthly income which invariably reduced the willingness to pay for the NHIS. Persons with health insurance may experience difficulty if their coverage does not extend to specific services or if deductibles are set at levels beyond their means to pay.\textsuperscript{15}

Therefore, a shift towards health insurance is welcomed in principle as proposed by the government, but achieving optimal involvement of the intended beneficiaries remains a major challenge. Past reviews of community financing have been largely descriptive, using macro level country data. Only recently have authors begun to consider the impact, strength and weaknesses of community based financing at the household level.\textsuperscript{16} In Lagos state Nigeria, a pilot community-based health insurance scheme in Olowora was launched as a collaboration between the Ikosi-Isheri Local Council Area and the Lagos State Ministry of Health on July 23, 2008.\textsuperscript{17}

This study aims to determine the knowledge, attitude, uptake and related factors of the community based health insurance scheme being operated at Olowora town.

**MATERIALS AND METHODS**

The study was a descriptive cross sectional study in Olowora community in Ikosi-Isheri Local Council Development Area (LCDA) of Kosofe Local Government Area (LGA). Sample size estimation was done using the formula for descriptive studies: \( n = z'^2pq/d^2 \). Assuming maximum variability and precision of 5\%, a minimum sample size of 384 was calculated and the sample size \( n \approx 384/0.8=480 \).

A multistage sampling technique was used for the survey. First, simple random sampling method was used to select 12 streets out of the 41 in Olowora Community. Next, all the houses on the selected streets were visited. Where there was more than a household in a house, only one was selected for interview by simple random sampling.

A pretested, interviewer administered questionnaire was used for data collection. The exercise was conducted during weekends and public holidays over a period of two weeks, when most of the household heads or most knowledgeable person (by highest level of education attained) was expected to be met at home.

**Data Analysis**

Epi-info (version 3.5.1), statistical software was used for data analysis. Each correct answer to the knowledge questions was scored 1 mark while a wrong answer or no response was scored 0. The total score for each respondent was determined and converted to a percentage of the total maximum score obtainable, and was then graded as poor (if less than 33\%), fair
(34-66%) and good (67% and above). Chi square test was used to test for associations at a significance level of 5%.

**RESULTS**

Although about 75% of respondents were aware of the community health insurance scheme (Figure 1), 49.5% had good knowledge of Community Health Insurance (Table 1). Majority of respondents (72.3%) who did not believe in contributing money before illness preferred to pay for their health care when ill (Table 2). While about half (53%) of respondents had enrolled into the community health insurance scheme (Figure 2), 45.6% of those who had not enrolled were not aware of the scheme and a quarter (25.6%) of them were not interested in health insurance (Table 3).

About half (51.5%) of those who were enrolled but could not renew their premium up to date said they did not have the money to do so (Table 4). There was a statistically significant association (p<0.001) between level of knowledge about community health insurance and uptake of the community health insurance at Olowora (Table 5). The higher the level of knowledge about the scheme, the higher the likelihood of enrollment into the scheme.

**Table 2: Respondents’ Reasons for not believing in Contribution before Treatment**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is like buying a disease</td>
<td>35</td>
<td>19.0</td>
</tr>
<tr>
<td>Prefer to pay when ill</td>
<td>133</td>
<td>72.3</td>
</tr>
<tr>
<td>Prefer to use money for other pressing needs</td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td>Others</td>
<td>14</td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>184</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Table 3: Reasons for not enrolling into the Olowora Scheme (N = 195)**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not interested</td>
<td>50</td>
<td>25.6</td>
</tr>
<tr>
<td>Not aware of the scheme</td>
<td>89</td>
<td>45.6</td>
</tr>
<tr>
<td>Have other means of healthcare</td>
<td>36</td>
<td>18.5</td>
</tr>
<tr>
<td>Other reasons</td>
<td>20</td>
<td>10.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>195</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Table 4: Reasons why premium was not paid up to date under the Olowora Scheme (n=70)**

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not ill since enrollment</td>
<td>15</td>
<td>21.4</td>
</tr>
<tr>
<td>Not satisfied with quality of care</td>
<td>19</td>
<td>27.1</td>
</tr>
<tr>
<td>Don’t have the money</td>
<td>36</td>
<td>51.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
**Uptake of Community-Based Health Insurance Scheme**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Uptake n(%)</th>
<th>No uptake n(%)</th>
<th>χ²</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>0 (0.0)</td>
<td>106 (100.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>32 (31.4)</td>
<td>71 (68.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>188 (91.3)</td>
<td>18 (8.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>221 (53.1)</td>
<td>195 (46.9)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DISCUSSION**

This study aims to determine the knowledge, attitude, uptake and related factors of the community based health insurance scheme being operated at Olowora town.

Lack of information alone accounted for 45.6% of reasons for non enrollment and this result is in agreement with earlier studies that suggested that knowledge remains an empowering tool in maintaining high enrolment17.

In this study, as much as 44.2% of respondents did not really believe in contributing money for illness yet to come, and majority (72.3%) of such respondents preferred to pay for their health care when they fell ill. This may be due to the fact that insurance culture in Africa is not common, as pointed out by Aridiogbu in Nigeria18. Weak financial institutions in low-income countries was also identified as one of the causes of low insurance culture19.

In two Community Health Insurance schemes in Ghana and Mali, 53% and 25% of the target population of 25,000 and 200,000, respectively were covered within the first few years of operation20. The results from this study agree more with the Ghana scheme where just two years after operation, about half of respondents (53%) were enrolled into the scheme.

In this study, some category of households could not afford the established premium; perhaps the introduction of income generating activities could ameliorate the situation for the core poor.

The significant positive effect of higher knowledge about the scheme on the enrollment is also noteworthy. If residents have more information about the scheme and how it operates, they are likely to enroll.

Some of the enrollees who did not fall sick and therefore had not benefited from the scheme felt that there were no ‘benefits’ in paying the contributions when not sick. However, most enrolled households saw the wisdom in pooling resources together since majority of them seemed to understand key features of the scheme than do those not enrolled.

The quality of care offered through the community-based health insurance scheme is another factor to be considered. Defaulting with premium payment was attributed to dissatisfaction with quality of care (QOC) by 27% of our respondents. It can then be assumed that if they were satisfied with QOC received, their payment may be up-to-date. The evaluation report of the Maliando scheme in Guinea-Conakry mentioned earlier showed that the better the quality of care, the more the confidence in the scheme, and the better the enrollment21.

**CONCLUSION AND RECOMMENDATION**

This study has shown that although 75% of Olowora community members were aware of the existence of the community health insurance scheme operating within their locality, only 49.5% of them had good knowledge of the scheme.

Lack of information alone accounted for 45.6% of the reasons for non enrolment.

It was found out that close to half of respondents do not really believe in contributing money for illness yet to come, and majority of such respondents prefers to pay for their health care when they fall ill.

Lack of money was the main reason why some enrollees had not paid their premium up to date.

The scheme management should critically evaluate its sensitization programmes to increase the level of knowledge about the scheme in the community. The scheme managers must tailor their marketing strategies to cater for the poor. Further research is however needed on how to scale-up and replicate the schemes, and on how to link them to other social risk management instruments such as microfinance institutions.

**REFERENCES**


