The Impact of Micro-Health Insurance on the Access to Health Care Services among the Informal Sector Employees in Urban Areas of Nigeria.

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2ième Conférence de l'Association Africaine d'Economie et de Politique de la santé (AfHEA)
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Introduction

- Health insurance in most African Countries is reserved for employees of the public and private sectors.
- There hardly exists health insurance for the rest of the population most of which is often poorer than the salaried workers of the public and private sectors.
- One of the consequences of this is that this section of the population lack easy access to adequate and quality health care services.

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Introduction

- Total Government Health Expenditure (TGHE) as a proportion of THE was estimated as 18.69 % in 2003, 26.40% in 2004 and 26.02% in 2005 while household health expenditure (HHHE) as a proportion of THE was 74.02% in 2003, falling to 65.73% in 2004 and rising to 67.22% in 2006 and stays around 70% till 2009. 2009).
- Health insurance expenditure has also been on the increase from 2003 in Nigeria,

Introduction

- Though its contribution to THE was relatively constant at 2% from 2003 to 2005. Health insurance expenditure which in 2003 was about N15.66 billion, increased by 20% to nearly N18.79 billion in 2004, N21.34 billion in 2005, 14% above the 2004 value (NHA, 2009).

- The picture above shows that households continue to be the major source of health financing in Nigeria

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Introduction

- To protect household from continuing catastrophic health expenditure and poor access to health services, the Nigerian government established National Health Insurance Scheme formally in 2006 (Soyibo and Lawanson, 2005).
- The scheme is made up of both compulsory and voluntary contribution for different set of participants and the set of groups covered were designed along three streams of programmes:

Introduction

- Formal Sector Programme (FSP), Informal Sector Programme (ISP) and Vulnerable Groups Programme (VSP).
- The formal sector programme is compulsory for formal sector workers both public and private and made up two types of programmes which are: Social Health Insurance (SHI) and Private Health Insurance (PHI).
- The informal sector programme are of two types: Work–Based Health Insurance (WBHI)

Introduction

- and Community-Based Health Insurance (CBHI). Membership of WBHI is made up of individuals of common economic interest who may be residing in rural or urban areas while membership of CBHI comprises of those in the same location and who enrolled in a Mutual Health Association (MHA).
- The vulnerable group programme operated under the Vulnerable Group Health Insurance (VGHI).

Introduction

- This covers the permanently disabled, the aged, prisoners, and those children under 5 years and pregnant women who otherwise have not been covered by other schemes.
- Table 1 and Table 2 present information about specific types of insurance coverage for women and men by background characteristics in Nigeria as at 2008.

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Introduction

- The tables show that majority of women and men have no health insurance coverage, about 98 and 97 percent, respectively.
- Among all categories of insurance, employer-based insurance is used most commonly.
- Only about 2 percent of men and 1 percent of women are covered by this type of insurance.
- Women and men in urban areas; about 4 and 5 percent and those in the highest wealth quintile about 6 and 8 percent, respectively.

Introduction

- Also, about 96.4% of women and 95% of men has no health insurance in urban areas while 99.2% of women and 98.5% of men has no health insurance in rural areas.
- Mutual health or community health insurance account for less that 1% for both men and women of different age-groups.

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Objective

- The fact that health insurance expenditure is growing suggest that the social health insurance (SHI) introduced in the formal sector has a high potential of success in the informal sector.

- This study analyzes whether micro-health insurance scheme can improve access to health care services to informal sector employees in the urban area of Nigeria.

REVIEW

- Determinants of Participation in Micro-Health Insurance and access to health Care Services by the insured
- Case Study : Lagos Mutual Health Insurance Scheme and Hygeia Community Health Plan
- On Determinants: include distance, financial barriers, acceptability of the provider, income, social and economic class of the patients and effectiveness of the care provided (Igun, 1979), trust (Devadasan et.al; 2005)

Review

- insured have access to health care more than the non-insured and one of the reasons for this is the fact that the patient does not have to pay out of pocket at the time of illness (Devadasan et.al; 2005.

- not just a financial barrier, but also a psychological barrier as patients are afraid of the unknown out of pocket expenditures when they go to the hospital.

Review

- The Lagos State Mutual Health Plan was launched on Wednesday, July 23, 2008. The scheme is a collaboration between the State Government, the Local Government and the Private Provider hence providing an element of Public-Private-Partnership (PPP).
- A pilot Community-Based Health Insurance Scheme
- The first phase of the scheme is Ikosi-Isheri Mutual Health Plan targeted at the peri-urban Olowora community with an estimated population of 70,000 people, the predominant proportion of whom are informal sector workers.

Review

- The target coverage for the scheme was set at 5,000 persons or 833 families which constitute just 7% of the total population of the community.
- The scheme provides a primary healthcare benefit package at a price of N800.00 per family of six persons per month or N400.00 per single person per month.
- The benefit package includes basic outpatient care with treatment of common ailments, provision of prescribed essential medicines, immunization, maternity care, health education, short-stay admissions and access to economic empowerment.

Review

- The enrolment rate shows a steady growth in the enrollees population on a monthly basis from the inception of the scheme.
- The scheme has grown from 567 members at inception in 2008 to 9,120 as at February 2010; a growth rate of 1,508% within two years.
- The enrolment profile according to residence within the three targeted communities of Olowora, Magodo and Isheri shows that above 60% of enrolments were from the host community–Olowora, with the remaining 40% coming from the other two contiguous communities as well as other non-target communities.

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Review

- Hygeia Health Maintenance Organization (HMO) was established in 1986 to provide health insurance across Nigeria. The Hygeia Community Health Plan (HCHP) was developed by Hygeia Nigeria Limited in conjunction with PharmAccess Foundation with the donor support of the Dutch Health Insurance Fund and was launched in January 2007.

- The Dutch Health Insurance Fund subsidizes health insurance premiums payable by the participants. It provides health care services to selected low-income communities in Lagos & Kwara states.

Review

- The target beneficiaries include organized groups of uninsured low income workers, such as women's associations, farming associations or communities, trade associations, rural communities.
- Current beneficiaries in Kwara and Lagos include Shonga and neigbouring communities, Edu Local Government Area, Kwara State, Bacita and Environs, Lafiagi and Environs, Lady Mechanic Initiative and Lagos Market Women Associations in Lagos.

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Review

- The benefit package includes Primary and out-patient care – which includes consultation with a general medical practitioner, laboratory investigations, provision of prescribed drugs, pharmaceutical care and diagnostic tests, Preventive care including immunization, consultation with specialists, hospital care in a standard ward, eye examination and care, X-rays, Minor surgery, pre and post natal care and delivery for a maximum of four live births, voluntary counseling and testing for HIV, treatment, monitoring and provision of anti-retroviral drugs.

Methodology

- A household survey using a two-staged sampling technique was carried out between April and July, 2010.
- First we use two health care centres of Ikosi-Isheri Mutual Health Plan and Hygeia Community Health Plan in Olowora Primary Health Care Centre and Lagoon Hospital in Ikeja, both in Lagos to elicit information and in the second stage few households were chosen in the targeted community and associations.
- Table 3 below summarized the participation rate of the members of the scheme in the survey

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Methodology

- To estimate the determinants of participation in a community insurance health plan, we follow an approach applied by Weinberger (2000) and adopted by Jutting (2001) .
- Participation in a local organization is depended on the rational choice of an individual weighting costs and benefits of membership.
- Participation depends on household income (I), characteristics of the household head (Z), household characteristics (V), community characteristics (N) and on the error term u, which is uncovariant with the other regressors.

Methodology

- However, we extend this approach by adding coverage of illness (C), perception about future health care expenditure(P), age (G), knowledge about health insurance(A),confidence in government policy (M) to the variables. Out-of-pocket expenditure based on the total spending on health care services during illness determine by the price of health care services (X) was added to determine utilization and access to health care services during illness.
- These variables were also found to be important in determining participation in micro-health insurance (see Devadasan et.al, 2005).

Methodology

The following equation therefore describes our model:

$$Y_i = f(I_j, Z_j, V_j, N_j, C_j, P_j, G_j, A_j, M_j, \mu_j) \quad \text{--------- (1)}$$

A binary probit model is employed to estimate the probability of participation, hence we have:

$Y_j = \alpha I_j + \beta Z_j + \gamma V_j + \delta N_j + \phi C_j + \lambda P_j + ¢G_j + §A_j + àM_j + \mu_j$-- (2)

where $Y_j = 1$ if $y^* > 0$, indicating that households j is a member of the micro-insurance scheme and $Y_j = 0$ if $y^* < 0$, meaning household j is not a member of the scheme.

To analyze the impact of micro-health insurance on utilization of health care services and access to health care services we considered income and price of health care services.

Methodology

We first analyzed the determinants of utilization of health care services and then investigate whether membership of micro-health insurance ensure easy and increase access to health care services or not.

We also use a two-part model developed as part of the Rand Health Insurance Experiment in the United States (Manning et.al, 1987) and adopted by Jutting, (2001) with a little modification.

A logit model which examine the probability of utilization of health care services:

$$\text{Prob(utilization} > 0) = R_{ß+} B_{ð} + \mu \quad \text{---------- (3)}$$

Methodology

Where R stands as a vector of household, community characteristics as defined above and B as estimates of income and incurred level of out-of-pocket expenditures conditioning on positive use of health care services

Finally a log-linear model to determine access to health care services by the members of the mutual health association:

$$Log(access/illness > 0) = R_{ß+} B_{ð} + e \text{ ---------- } (4)$$

Methodology

Where R again represents a set of independent variables assumed to affect individual pattern of utilization and B represent income and price of health care services during illness. μ and e are stochastic error term.

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Results

- The result shows that age, literacy level, relationship of the household, income, health status, knowledge about health insurance, community characteristics, frequency of illness, confidence in government programmes and benefit package have the expected positive influence on membership of mutual health insurance.
- All these factors influence the demand for health insurance in urban areas of Nigeria.

Results

- The results also show that members of mutual health insurance utilize health care facilities than non-members

- only health status, frequency of illness, confidence in government programmes and benefit package are significant among factors that influenced utilization of health care services by member of the scheme while income and out-of-pocket expenditures are insignificant.

Results

- The result further shows that members of the mutual have more access to health care facilities than non-members.

- Also both men and women who are members of the scheme have more access to health care facilities and that income, level of education became less significant in determining access to health care facilities among the members.

Conclusion and Policy Recommendation

- The study shows that health insurance for the informal sector employees and the poor is possible and feasible under certain condition, one of which is granting of subsidy on the premium paid by the insured.

- To increase access to health care services of the poor and informal sector population, community based health insurance schemes can be a viable avenue.

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Conclusion and Policy Recommendation

- It allows to a limited degree to pool risks and thereby leads to an improvement in the health care system, where most people otherwise have to pay their health expenditure out-of-pocket.

- The study also points to the issue of sustainability. Because in the absence of subsidy income and out-of-pocket expenditures on health care may become an important determinant of the membership of the scheme.

Conclusion and Policy Recommendation

- To ensure sustainability of the scheme, a good attention need to be given to increasing the productivity and income of the informal sector employees and the poor.

- Be that as it may, we can conclude that micro-health insurance scheme can increase access to health care services and utilization of modern health care services by the informal sector employees provided people have confidence in the government programmes and credible and effective provider are available.

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Table 1: Health Insurance Coverage: Women

Percentage Distribution of Women Age 15-49 by type of Health Insurance Coverage, according to Background Characteristics, Nigeria 2008

Background Characteristics	Employer-based Insurance	Mutual health organization/Community-based insurance	Privately purchased commercial insurance	Other	No health insurance	Number of women
Age						
15-19	0.5	0.1	0.1	0.2	99.0	6,493
20-24	0.7	0.1	0.3	0.2	98.8	6,133
25-29	1.4	0.1	0.3	0.2	98.0	6,309
30-34	1.7	0.2	0.2	0.1	97.9	4,634
35-39	2.1	0.3	0.2	0.2	97.3	3,912
40-44	2.6	0.1	0.1	0.1	97.1	3,032
45-49	1.0	0.1	0.1	0.1	98.7	2,872
Residence						
Urban	2.8	0.2	0.4	0.2	96.4	11,934
Rural	0.5	0.1	0.1	0.1	99.2	21,451
Zone						
North Central	2.0	0.2	0.2	0.2	97.4	4,748
North East	0.3	0.1	0.0	0.0	99.5	4,262
North West	0.4	0.2	0.0	0.0	99.3	8,022
South East	0.4	0.1	0.1	0.0	99.3	4,091
South South	2.0	0.2	0.5	0.7 0.0	96.6 97.3	5,473
South West	2.3	0.1	0.3			6,789
Education						
No education	0.1	0.0	0.0	0.0	99.9	11,942
Primary	0.4	0.1	0.1	0.0	99.3	6,566
Secondary	1.3	0.1	0.3	0.3	98.0	11,904
More than secondary	8.1	0.6	0.9	0.6	89.8	2,974
Wealth quintile						
Lowest	0.0	0.0	0.0	0.0	99.9	6,194

Second	0.0	0.0	0.0	0.0	99.9	6,234
Middle	0.2	0.1	0.1	0.1	99.5	6,341
Fourth	0.9	0.2	0.2	0.1	98.6	6,938
Highest	4.5	0.3	0.6	0.5	94.0	7,678
Total	1.3	0.1	0.2	0.2	98.2	33,385

Source: Nigeria Demographic and Health Survey, 2008

Table 2: Health Insurance Coverage: Men

Percent Distribution of Men Age 15-49 by type of Health Insurance Coverage, according to Background Characteristics, Nigeria 2008

Background Characteristic	Employer-based Insurance	Mutual health organization/community-based insurance	Privately purchased commercial insurance	Other	No health insurance	Number of women
Age						
15-19	0.2	0.0	0.3	0.3	99.1	2,532
20-24	1.1	0.1	0.3	0.4	98.2	2,378
25-29	1.8	0.4	0.3	0.4	97.2	2,459
30-34	2.3	0.3	0.4	0.1	96.8	2,058
35-39	3.8	0.0	0.2	0.5	95.4	1,794
40-44	2.9	0.7	0.6	0.5	95.4	1,413
45-49	2.6	0.0	0.5	0.8	96.2	1,174
Residence						
Urban	3.4	0.3	0.4	0.8	95.0	5,215
Rural	1.0	0.1	0.3	0.2	98.5	8,593
Zone						
North Central	2.1	0.1	0.3	0.2	97.2	2,065
North East	0.9	0.0	0.0	0.0	99.0	1,645
North West	1.2	0.4	0.2	0.2	97.9	3,237
South East	1.6	0.4	0.7	0.0	97.6	1,448
South South	3.3	0.1	0.7	0.8	95.2	2,437
South West	2.1	0.1	0.3	0.8	96.7	2,977
Education						

No education	0.1	0.0	0.2	0.0	99.8	2,597
Primary	0.6	0.0	0.2	0.0	99.3	2,761
Secondary	1.4	0.3	0.3	0.4	97.7	6,470
More than secondary	7.9	0.7	1.1	1.5	89.0	1,979
Wealth quintile						
Lowest	0.1	0.0	0.1	0.1	99.8	2,275
Second	0.3	0.0	0.1	0.0	99.6	2,332
Middle	0.6	0.2	0.3	0.0	98.8	2,570
Fourth	2.0	0.2	0.4	0.3	97.2	3,165
Highest	5.1	0.5	0.7	1.2	92.5	3,468
Total 15-49	1.9	0.2	0.4	0.4	97.2	13,808
50-59	2.2	0.4	0.3	0.5	96.7	1,678
Total men 15 – 59	1.9	0.2	0.4	0.4	97.1	15,486

Source: Nigeria Demographic and Health Survey, 2008.

Table 3: Members and Non-Members of the Scheme Participation Rate in the Survey

Health Facility/Target Community	Number of Response	Response Rate (%)
Olowora Primary Health Centre	223	89.2%
Lagoon Hospital, Ikeja	153	61.2%
Olowora/Magodo/Isheri Community	235	94.0%
Lagos State Market Women	205	82.0%

Source: 2010 Field Survey.