

**WILLINGNESS TO PAY FOR VOLUNTARY CONTRIBUTOR SOCIAL HEALTH
INSURANCE AMONG RURAL DWELLERS IN ERUWA, OYO STATE, NIGERIA**

By

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DEDICATION

This work is dedicated to the Holy Trinity, the tripod which holds my whole world in His hands.

To my family, the Ojezeles' without whom I am incomplete.

ABSTRACT

The National Health Insurance Scheme (NHIS) was introduced in Nigeria to provide social protection and reduce health expenditures. Despite its promising objectives, the scheme is faced with challenges of poor coverage and unwillingness to participate and pay particularly among the informal sector. In Nigeria, there is paucity of information about the feasibility of voluntary health insurance and people's willingness to pay for it. This study was designed to identify the factors that influence willingness to pay for the Voluntary Contributor Social Health Insurance by rural dwellers in Eruwa, Oyo State.

This descriptive cross-sectional study was carried out between September and November, 2014. Two hundred and sixteen out of 255 communities and 360 households out of 2160 households were selected using systematic random sampling from the six wards. Data were collected using a validated, pre-tested, interviewer-administered questionnaire to elicit information on socio-demographics, most recent types of sickness, payment coping mechanism, knowledge of health insurance and willingness to pay. Willingness to pay approach based on the Contingent Valuation Method was used to elicit the amount to be paid. Each respondent was presented with an initial bid amount (₦1500) and if the respondent accepts to pay this amount, the interviewer revises this amount upwards by ₦200 each time until a ceiling is reached where respondents were asked to state the maximum amount they were willing to pay. On the other hand, if the respondent refuses the initial bid (₦1500), this is further lowered by ₦200 each time. A negative response will require the respondent to state the minimum amount he/she will be willing to pay. Data were analysed using descriptive statistics and probit regression.

Age of respondents was 38.2 ± 2.7 years with majority (94.7%) of the household heads being males and 82.6% were married. Trading (32.3%) was the commonest occupation and 51.4% attended at most secondary school education. Fever was the predominant complaint (35.5%) in the households in the past one month. Out-of-pocket payment constituted the mode of payment for treatment in 86.2% of participants. Most (71.3%) had not heard about health insurance and 77.2% of the household heads were willing to pay an average amount of ₦360 (range of ₦200 – ₦500) per person per month. Financial constraint was the main reason why majority (60.5%) would not be willing to pay for health insurance. Household size, health status, living standard and food expenses significantly influenced their willingness to pay positively.

There is high enthusiasm to pay for the voluntary contributor health insurance among rural dwellers; though, the agreed amount was low. It is therefore imperative for the government to provide subsidy to rural dwellers that may not be able to access health care services given their low level of income and vulnerability to diseases.

Keywords: Willingness to pay, Voluntary Contributor Social Health Insurance, National Health Insurance Scheme, Contingency valuation, Rural dwellers

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CERTIFICATION

This is to certify that this work was carried out by OJEZELE, Samuel Omontuemen in the Department of Health Policy and Management, Faculty of Public Health, University of Ibadan, Ibadan, Nigeria.

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LIST OF ABBREVIATIONS

| | |
|-------|--|
| CBHI | Community Based Health Insurance |
| CSPRO | Census and Survey Professional |
| CVM | Contingent Valuation Method |
| GDP | Gross Domestic Product |
| NHA | National Health Accounts |
| NDHS | Nigeria Demographic and Health Survey |
| NHIS | National Health Insurance Scheme |
| NIPDs | National Immunisation Plus Days |
| THE | Total Health Expenditure |
| UNDP | United Nations Development Programme |
| VCSHI | Voluntary Contributors Social Health Insurance |
| WHO | World Health Organisation |
| WTP | Willingness to Pay |

CHAPTER ONE

INTRODUCTION

1.0 Background to the study

The central role of health to national development and poverty reduction is self-evident, as improving health status and increasing life expectancy contribute to long term economic development. The legitimacy of any national health system depends on how best it serves the interest of the poorest and most vulnerable people, for which improvements in their health status gear towards the realisation of poverty reduction goals. In the Nigerian context, current reviews show that the country is presently not on course to achieving the Millennium Development Goals (MDGs) related to health by 2015. This poses a major developmental challenge, which will impede and undermine development and economic growth (FMOH, 2009).

In a world with surplus, it becomes increasingly unacceptable that people die or suffer because they have no access to even the most basic of medical care. Equally as distressing is when impoverishment is the result of large or catastrophic health expenditures. Evidence from surveys which covered 89% of the world's population suggested that 150 million people globally suffer financial catastrophe every year due to out-of-pocket health expenditures (Evans et al., 2007). Another potential scenario is perpetual poverty due to the inability to work because of poor health despite such expenditures. This downward spiral of impoverishment and ill health could be lowered through improved health financing mechanisms. Constrained government budgets for health, however, are a serious problem in many developing countries (Abay et al., 2008).

The major sources of finance for the health sector in Nigeria are the three tiers of government (Federal, State and Local Government), public general revenue accumulated through various forms of taxation, the health insurance institutions (private and public), the private sector (firm and households), donors and mutual health organizations. Private and household expenditure on health between 1998 and 2002 have an average of 69.1% and 64.3% respectively while government expenditure in the same period was a paltry 20.6% (Soyibo et al., 2005).

Provision of adequate and sustainable finance is vital for effective, efficient and equitable health system performance. In view of this, fairness in health financing has been

recognised as one of the goals of a health system. The Nigerian health system has been rated poorly in this area over the years. This indicated that the burden of health expenditure is very high on households. Hence, the need to explore and improve other sources of financing that is efficient, fair and sustainable (National Health Financing Policy, 2006).

Various sources of health care financing are available in Nigeria like in most other similar countries of the world; these include budgetary allocations from the government at all levels of the federalism structure (local government, state, and federal); loans and grants obtained from multilateral and bilateral agencies in the form of international aid; private sector contributions and out-of-pocket payment (WHO, 2002). The real challenge of health care financing in Nigeria as in many sub-Saharan African (SSA) countries lies not primarily in the acute scarcity of resources, but due to inefficient healthcare purchasing practices and paucity of insurance mechanisms (Soyibo, 2004).

One strategy to improve health financing in Nigeria is the National Health Insurance Scheme (NHIS) which was launched in 2005. This scheme is government-driven but operated by private sector health maintenance organizations (Onwujekwe and Velényi, 2012). Health insurance is a social security that guarantees the provision of needed health services to persons on the payment of token contribution at regular intervals. Experts also conceptualized health insurance as insurance against the risk of incurring huge and unaffordable medical expenses among citizens of a nation. By assessing the overall risk of health care expenses among a targeted group, an insurer can develop a routine finance structure, such as a monthly premium or pay roll tax, to ensure that money is available to pay for the health care benefits specified in the insurance agreement (PanAfrican Capital Industry Report, 2012).

Alternative forms of health care financing and cost-recovering strategies have been heavily criticised, the option of insurance seems to be a promising alternative as it is a possibility to pool risk transferring, unforeseeable healthcare costs, to fixed premiums. Health insurance schemes are increasingly recognised as key factors to finance healthcare provision in low income countries. Given the highest latent demand from people for good quality healthcare services and the extreme under- utilisation of health services in several countries, it has been hoped that social health insurance may improve the access to health care of an acceptable quality (Oyekale and Eluwa, 2010). Financial contributions for health are considered as fair when health expenditure of households is distributed

according to ability to pay rather than actual costs incurred as a consequence of illness (Carrin, 2003).

1.1 Problem Statement

The Nigeria health service delivery worsened in the early 1990s due to lack of appropriate financial commitment that resulted in shortage of drugs, vaccines and other essential medical equipments. The government had initially provided “Free health care” for its citizens funded by its earnings from oil exports and general tax revenue. However, the global slump in oil prices in the 1980s greatly affected Nigeria’s major source of income. Government could therefore no longer afford to provide free health care for its citizens. They however, subsequently introduced several cost recovery mechanism like user charges and drugs revolving funds (Akande et al., 2011).

In spite of federal government financial involvement, coupled with bilateral and multilateral assistance in the health sector, the patterns of health status in Nigeria mirror many other Sub-Saharan African nations (FMOH, 2005). In 2003, out of pocket expenditure accounts accounted for 74% of Nigeria’s Total Health Expenditure and decreased to 66% in 2004 and later increased to 68% in 2005 (Soyibo et al., 2009). With a high incidence of poverty and the predominance of out of pocket (OOP) payments, further impoverishment of households may persist if OOP payments still continue. This is because poor households may not be able to access health care services given their low level of income and vulnerability to diseases (Ataguba et al., 2008).

Sequel to the reduced access to health care, households often resort to leave the illness untreated or resort to the use of low quality care or self-medication. In the long-run, this will further impoverish the households (Organisation for Economic Co-operation and Development/World Health Organisation, 2003). When the households decide to make out of pocket payments for medical bills at the point of utilisation of health services this is often catastrophic in nature, especially for the poor (Ranson, 2002). This is because health care payment is not expected to exceed household income. This has become a major source of concern and worry for Nigeria and other similar low and middle income countries (LMICs) (Ataguba et al., 2008).

In Nigeria, community-based health insurance (CBHI) has emerged as an alternative to user fees. Community-based health insurance CBHI schemes are designed to ensure that sufficient resources are made available for members to access effective health care. Contributions are accumulated and managed to spread the risk of payment for health care among all scheme members, although CBHI is known to be particularly vulnerable to adverse selection, where disproportionate enrolment by high risk contributors accompanies non-participation by low risk individuals (Odeyemi, 2014).

There are various forms of CBHI, including mutual health organisations, medical aid societies and micro-insurance schemes. All are voluntary and apply the basic principle of risk sharing. Unfortunately, some CBHI schemes operating in sub-Saharan Africa (SSA), including that of Nigeria, have been hampered by low enrolment rates, limited resource mobilisation and poor sustainability (Allegri et. al., 2009).

However, there is scanty information about the feasibility of voluntary health insurance and whether people will be willing to pay for the scheme and it is very important to study the willingness of households to participate and pay for voluntary contribution social health insurance (Onwujekwe et al., 2012). Determining the demand or willingness-to-pay for health insurance is crucial in ascertaining the feasibility of such schemes, establishing prices, and setting potential subsidy levels (Abay et al., 2008).

1.2 Rationale for the study

In Nigeria, access to affordable social services and health care services for the poor still remains a big challenge that has not been fully resolved. While the rich in urban areas of the country have access to quality health care services, the poor in the rural areas are largely deprived access to quality health care services. Infrastructures in these rural areas are also poor and a large proportion of about 65% of the population live in these rural areas where the standard of living is poor (WHO, 2002).

Access to quality and affordable health care services for the rural population is reduced due to the level of poverty, distances to be travelled to access health care and the absence of financial protection in the form of insurance or prepayments. As a solution for the poor in rural areas where the burden of disease is high, prepayment schemes and community-based insurance schemes have been advocated (Dong *et al.*, 2003).

In a bid to improve the health status of Nigerians, the government under the National Economic Empowerment Development Scheme Strategy (NEEDS), has decided to improve physical and financial access to good quality health services and also increase consumers' awareness of their rights and obligations. One of the ways with which to achieve this, was to develop and implement a comprehensive healthcare financing strategy, including the fast tracking of the National Health Insurance Scheme (NHIS) and to develop and implement a strategy to enhance community participation in providing and financing health services (NEEDS, 2004).

It is interesting to note that the Nigerian National Health Insurance Scheme (NHIS) which was launched in 2005 covers only a small proportion of the Nigerian population. There is therefore an increase in out of pocket (OOP) spending on health needs and a paucity of insurance mechanisms to manage risks (Onwujekwe and Velényi, 2012).

In this environment, financing health systems through voluntary health insurance has emerged as an efficient and robust tool to achieve universal health coverage with adequate financial protection for all against catastrophic health expenditure. The scheme intends to respond to the goal of fairness in financing, in that beneficiaries are asked to pay according to their means while assuring them the right to adequate health services according to need (Carrin et al., 2007).

1.3 Research Questions

1. What is the proportion of respondents with Out of Pocket Payment (OOP)?
2. What is the level of awareness of respondents relating to health insurance?
3. What is the proportion of respondents who are willing to pay for the health insurance?
4. What is the amount respondents would be willing to pay per month per household member for Voluntary Contributor Social Health Insurance?
5. What are the factors influencing the willingness to pay for Voluntary Contributor Social Health Insurance?

1.4 Objectives

The broad objective of conducting this study was to identify the factors that may facilitate willingness to pay for Voluntary Contributor Social Health Insurance (VCSHI) among rural dwellers in Eruwa, Oyo State.

The specific objectives were to:

1. Assess the living standard of the households.
2. Assess the payment coping mechanisms of the households to pay for health care.
3. Assess the Willingness to Pay for the Voluntary Contributor Social Health Insurance.
4. To identify the determinants of Willingness to Pay for the Voluntary Contributor Social Health Insurance (VCSHI).

1.4 Operational Definition of Terms

Voluntary contribution: This means an informed and independent choice of household heads to enrol (or not) in the health insurance.

Out of Pocket Payments: These are payments for health services at the time of illness paid directly by household.

Household head: An individual in a family who provides actual support and maintenance to one or more individuals who are related to him or her through adoption, blood, or marriage.

Payment coping mechanisms: These are methods of payment by household members for treatment.

CHAPTER TWO

LITERATURE REVIEW

2.0 Health System Financing

Health care financing system is a process by which revenues are collected from primary and secondary sources, e.g. out-of-pocket payments (OOPs), indirect and direct taxes, donor funding, co-payment, voluntary prepayments, mandatory prepayment, which are accumulated in fund pools so as to share risk across large population groups and using the revenues to purchase goods and services from public and private providers for identified needs of the population, e.g., fee for service, capitation, budgeting and salaries (Carrin, 2007).

A health care financing mechanism should provide sufficient financial protection so that no household is impoverished because of a need to use health services. One-way of providing such protection is by incorporating a risk-sharing plan in the health care financing mechanism, whereby the risk of incurring unexpected health care expenditure does not fall solely on an individual or household (McIntyre, 2007)

Governments around the world are realising that while publicly financed, universal health care is undoubtedly humane, it can be an enormous drain on national resources and extremely difficult to sustain in the long run. Hence a public-private mix of funding mechanisms exists in most countries (Meng-Kin, 2004). Therefore, Social Health Insurance is recognized to be a very powerful method for granting the population access to health services in an equitable way (Carrin, 2002). Social health insurance schemes are generally understood as health insurance schemes provided by governments to its citizens, especially to low and middle income populations. Recently, apart from governments, several non-governmental organisations at the community level provide social health insurance in developing countries (Churchill, 2006). Social health insurance pools both the health risks of its member and the contributions of enterprises, households and government, on the other, and is generally organized by national governments (Carrin, 2002). Most social health insurance schemes combine different sources of funds, with government often contributing on behalf of people who cannot afford to pay themselves (WHO, 2004).

Health insurance schemes are increasingly recognised as a tool to finance health care provision in developing countries and has the potential to increase utilization and better protect people against (catastrophic) health expenses and address issues of equity (WHO, 2000). Health financing systems through general taxation or through the development of social health insurance are generally recognised to be powerful methods to achieve universal coverage with adequate financial protection for all against healthcare costs (Doetinchem et al., 2006).

The nature of healthcare financing defines the structure, the behaviour of different stakeholder's and quality of health outcomes. The pattern of health financing is therefore closely and indivisibly linked to the provisioning of services and helps define the outer boundaries of the system's capability to achieve the overall goal of enhancing nation's economic development (Rao et al., 2009). Health care financing therefore does not only involve how to raise sufficient resources to finance health care needs of countries, but also on how to ensure affordability and accessibility of healthcare services, equity in access to medical services as well as guarantee financial risk protection (Hodo and Emmanuel, 2012). Research has it that the manner in which health systems are financed largely determines whether people can obtain needed health care and whether they suffer financial hardship at the instance of obtaining care (Carrin et al., 2007).

Health care in Nigeria is financed by a combination of tax revenue, out-of-pocket payments, donor funding, and health insurance (social and community) (WHO 2009). Nigeria's health expenditure is relatively low, even when compared with other African countries. The total health expenditure (THE) as percentage of the gross domestic product (GDP) from 1998 to 2000 was less than 5%, falling behind THE/GDP ratio in other developing countries such as Kenya (5.3%), Zambia (6.2%), Tanzania (6.8%), Malawi (7.2%), and South Africa (7.5%) (Soyibo, 2005). Achieving a successful health care financing system continues to be a challenge in Nigeria. Limited institutional capacity, corruption, unstable economic, and political context have been identified as factors why some mechanisms of financing health care have not worked effectively (Adinma and Adinma 2010).

In Nigeria, revenue for financing the health sector is collected majorly from pooled and un-pooled sources. The pooled sources are collected from budgetary allocation, direct and indirect taxation as well as donor funding. However, the un-pooled sources contribute over 70% of total health expenditure (THE) and this can be: OOPs in the forms of fees

(informal or formal direct payments to healthcare providers at the time of service) about 90% and payments for goods (medical products such as bed-nets, or condoms) and about 10%. Despite these health financing options in Nigeria, the finances are still disproportionately distributed across the health system and with regional inequity in healthcare expenditure (Lawanson and Olaniyan, 2013).

2.1 Tax revenue

Health financing systems where government revenues are the main source of health care expenditure are referred to as tax-based systems (Savedoff, 2004). Funds are usually generated through taxation or other government revenues. Although the Nigerian government generates revenue through taxation, the bulk of the revenue is derived from the sale of oil and gas. Revenues are raised at the federal, state, or local government levels. However, the federally generated revenue which is shared according to a formula forms the majority of the funds for the other tiers of government. The states and local governments being closer to PHC are expected to provide adequate funding for PHC, but owing to their low internal revenue generation capacities, most of them still largely depend on the allocation from the federal government. The federal allocations to the states and local governments are not earmarked neither do the states and local governments required to provide budget and expenditure reports to the federal government (Nigerian Health system Online, 2011).

The total government health expenditure as a proportion of Total Health Expenditure (THE) was estimated as 18.69% in 2003, 26.40% in 2004, and 26.02% in 2005 (Soyibo, 2009). Remarkably, the federal budgetary component of health expenditure has increased over the years. It increased from 1.7% in 1991 to 7.2% in 2007 (WHO 2009). Given this level of government spending, it will be very difficult to provide the essential health care services, and with the vagaries of the oil prices in the world market, a low tax base, and other preponderant issues, health care will always be at the peril of underfunding by the Nigerian government (Babayemi, 2012).

2.2 Out-of-Pocket Payment

Out-of-pocket spending constitutes a large and very important source of health care financing in developing countries. Payments are not made beforehand but when care is needed. This can have catastrophic outcomes, especially for low-income families: (i)

people may not be able to pay for needed care and thus risk a grave deterioration of their health condition, (ii) people may be reluctant to pay for needed care and thus fail to get therapy when it is still effective, or (iii) people may pay for needed care by using a large portion of their resources and thus risk impoverishment (Denis and Johannes 2005). The charges levied for health care services are referred to as user fees. The scope of user fees is quite variable and can include any combination of drug costs, medical material costs, entrance fees, and consultation fees (Largade and Palmer 2006). Out-of-pocket accounts for the highest proportion of health expenditure in Nigeria. Out-of-pocket expenditure accounts for averagely 64.59% from 1998-2002 (Soyibo, 2005). In 2003, it accounted for 74% of Total Health Expenditure. It decreased to 66% in 2004 and later increased to 68% in 2005 (Soyibo et al., 2009). This implies that households bear the highest burden of health expenditure in Nigeria (Babayemi, 2012).

2.3 Community Based Health Insurance

Community-Based Health Insurance (CBHI) is a form of private health insurance whereby individuals, families, or community groups finance or co-finance costs of health services. (Adinma et al., 2010). Other forms of private health insurance include non-profit and for-profit plans (Savedoff et al., 2005). Usually, private health insurance is voluntary compared with SHI schemes which tend to be mandatory. CBHI is designed for people living in the rural area and people in the informal sector who cannot get adequate public, private, or employer-sponsored insurance (Uzochukwu et al., 2009). It usually involves some form of community involvement in their management. The effects of CBHI on equity, the quality, and efficiency of health services are still ambiguous (Jakab et al., 2001). It has been shown that even when charges are small, the very poor are unable to enrol (Jütting, 2004). Thus, the existing inequalities may be worsened, since the less poor people are more likely to enrol and have improved access to care and financial protection.

The Nigerian government intends to use CBHI to cover people employed in the informal sector and in the rural area (Adinma et al., 2010). CBHI was piloted and introduced in Anambra State in 2003. However, since the change in government in 2005, the scheme has been dormant owing to the diminished support and interest by the new government (Uzochukwu et al., 2009). A study that evaluated the impact of the Anambra community health care financing scheme in one of the communities on maternal health services

reported that the scheme was highly accepted and it provided adequate funds for maternal health services for a great proportion of the rural communities (Adinma et al., 2010).

2.4 Donor Funding

This refers to financial assistance given to developing countries to support socioeconomic and health development. Financial assistance to Nigeria has not been tremendous. *De facto*, it witnessed a declining trend before the return of the democratic governance in 1999 (WHO, 2011).

The annual average official development assistance inflow from 1999 to 2007 was estimated at US\$ 2.335 and US\$4.674 per capita, respectively (UNDP 2011). These figures are way below the Sub-Saharan African average of US\$28 per capita (7,57). The contribution of development aid to health care financing in Nigeria was estimated as N27.87 billion (4% of THE) in 2003. This increased by 29% to N36.04 billion (4.6% of THE) in 2004 and by just 1% to N36.30 billion (4% of THE) in 2005 (Soyibo et al., 2009). Although the international assistance to the Nigerian health sector is increasing, it still accounts for a small proportion of public health expenditures. The major challenges in Nigeria with donor funding are effective coordination of the funds and tracking donor resource flow (WHO, 2009)

2.5 Spending on health (Public and Private)

Spending on health care in Nigeria has been characterized by the declining budgetary provisions since 1980 which has resulted to the proportion of total budget to health being less than 8% on average. The deregulation of healthcare financing and supply in Nigeria has shifted the healthcare system towards the competitive market ideals thereby ignoring the poverty and inequality reduction ideals which should be the guiding principle of a developing country like Nigeria (Ichoku, 2011).

Private healthcare spending (Private healthcare spending includes direct household (out of pocket) spending, private insurance, charitable donations, and direct service payments by private corporations.) as a percentage of Gross Domestic Product (GDP) in Nigeria increased from 2.91 in 2002 to 3.71 in 2009 (WHO, 2011). On the other hand, public health facilities in Nigeria are financed primarily by the public through tax revenue and

external foreign aid contributions to the national budgets. Public spending here covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation. However, they are generally underfinanced, overcrowded and have insufficient personnel because of financial constraints.

Although, the Nigeria's overall health system performance is reported to be ranked 187th among the 191 member States in 2000, the 2006 MDG report of the country indicates that the country is still struggling to meet the MDG health goals (NPC, 2006). Infant mortality rate in 2008 was 75 deaths per 1,000 live births while the overall under-five mortality rate for the same period is 157 deaths per 1,000 live births (NDHS, 2008).

Table 2.0: Federal allocation to health in relation to the total budget and GDP

| | Year | Total allocation (NGN in Billion) | Allocation to health (NGN in Billion) | % of total budget | GDP (NGN in Billion) | % of GDP |
|----|------|-----------------------------------|---------------------------------------|-------------------|----------------------|----------|
| 1. | 2009 | 3,557.7 | 154.6 | 4.3 | 25,102.44 | 0.6 |
| 2. | 2010 | 4,427.2 | 164.9 | 3.7 | 30,980.84 | 0.5 |
| 3. | 2011 | 4,971.9 | 266.7 | 5.4 | 36,123.11 | 0.7 |

Source: Budget Office of the Federation, Federal Ministry of Finance (2012)

Indications from the Nigeria Health Sector Report show that government allocation and actual releases to the health sector still remain low at federal, state and local government levels. The consequence of these small allocations by all the arms of government have increased household financial risks during illness and more immensely heavily on the pro-poor groups in the rural communities in all the LGAs studied. Therefore, community health financing interventions designed to pooling resources together will minimise the negative impact of household OOP health expenditure.

In developing countries, a larger percentage of overall market-level medical care costs are being paid out of pocket by citizens. However, the portion paid in this fashion differs to some extent across countries at similar income levels, depending on the form of public programmes; it is almost always relatively large. Out of pocket private expenditure is a major source of health financing and was estimated to account for 19.7% of spending globally: 24.1% in Africa, 24.5% in Eastern Europe and Central Asia, 35.6% in the

Americas, 38.8% in the Middle East, 59.3% in Asia and the Pacific, and 74.1% in South Asia (Murray and Evans 2003). The percentage of national health expenditures paid out of pocket is estimated to be 26% in Colombia, 47% in Indonesia, and 80% in Vietnam (World Bank, 2007).

2.6 National Health Insurance Scheme (NHIS)

One strategy to improve health financing in Nigeria is the National Health Insurance Scheme (NHIS), launched in 2005. The National Health Insurance Scheme (NHIS) established under Act 35 of 1999 by the Federal Government of Nigeria, is aimed at providing easy access to healthcare for all Nigerians at an affordable cost through various prepayment systems. NHIS is totally committed to securing universal coverage and access to adequate and affordable healthcare in order to improve the health status of Nigerians, especially for those participating in the various programmes/products of the Scheme. In order to ensure that every Nigerian has access to good health care services, the National Health Insurance Scheme has developed various programmes to cover three major sectors of Formal, Informal and Vulnerable groups (NHIS website).

The need for the establishment of the Scheme was informed by the general poor state of the nation's healthcare services, the excessive dependence and pressure on government provided health facilities, dwindling funding of healthcare in the face of rising costs, poor integration of private health facilities in the nation's healthcare delivery system and overwhelming dependence on out-of-pocket expenses to purchase health.

It is not surprising that compared to their urban counterparts; rural households tend to suffer disproportionately from higher levels of ill health, mortality, malnutrition and inadequate health care. In order to reach the poor in rural areas with quality health care services, many policymakers and international organizations have been advocating for alternative health care insurance schemes (Gwathin et al., 2005).

2.7 Willingness to pay for Social Health Insurance

In the past, social protection and risk management in developing countries has been examined from the supply side. More recently, many authors have begun to focus their analyses on the demand side. For example, researchers have started to explore the potential of community-based health insurance as an effective instrument to improve access to health care and alleviate poverty in rural areas. In several countries, community-based prepayment schemes have proven to increase access to health care services,

especially among children, pregnant women, rural households, and informal workers, a majority of whom are excluded from formal insurance (Dror et al., 2006).

As community-based health insurance scheme become an important issue, some empirical studies were done by some authors to assess the WTP of households for such a scheme. Currently, very few studies have been conducted in rural areas with objective of assessing the willingness to pay (WTP) by rural households for a community-based health care prepayment scheme (Donfouet et al., 2011).

Dror et al., (2007) also study households' WTP for health insurance by analysing data from a bidding game conducted in more than 3,000 households in India. The result showed a higher WTP and a positive link between households' income and WTP.

Barnighausen et al., 2007 examined WTP among informal sector workers in Wuhan, China. Informal workers have a WTP that is higher than the estimated cost of CBHIS based on past health expenditures. Dror et al., (2007) use unidirectional bidding in a CV survey to obtain estimates of WTP for health insurance in India. They found that the poor are willing to pay a higher percentage of their income on health insurance premiums compared to higher income groups. Asgary et al. 2004 examine willingness to pay for health insurance in rural Iran and found that households are willing to pay on average US\$2.77 per month for health insurance.

2.8 Eliciting WTP for health insurance using Contingent Valuation Method

Few environmental goods are bought and sold in the marketplace. For economists to move beyond an analysis of the cost-effectiveness of providing a specified level of a particular environmental good it is necessary to have some way of estimating the value of providing different levels of the amenity relative to its cost (Carson et al., 2001). However, health care is not a good traded on the market as other commodities; hence, giving a value to it can be complex. To solve this problem, economists have put in place the contingent valuation method (CVM) which mainly consists of estimating the value a person places on a good, usually one that is not sold in the market. This method is now the most widely accepted approach for assessing WTP for services in the health sector (Donfouet et al., 2011).

In the absence of real world experience, economists gauge the willingness-to-pay (WTP) for health insurance in low income countries by means of contingent valuation (CV)

methods which elicit directly what individuals would be willing to pay for a hypothetical health insurance package (Abay, 2008). Proposed by Davis (1963), the Contingent Valuation (CV) method has been used in many areas including environment, health, transport and marketing and has proven to be a useful instrument to obtain information on people's preferences for non-marketed goods. The CV method which belongs to the family of the so-called stated preference techniques is a "survey-based method frequently used for placing monetary values on environmental goods and services not bought and sold in the marketplace" (Carson, 2000)

Contingent valuation involves asking individuals about the economic values they attach to various services of the environment. These services could be those associated with actual use of the resource or they could be for anticipated use or not for any purpose related to use - just the knowledge that the resource exists. The most commonly used approach in contingent valuation asks respondents the maximum amount that they would be willing to pay for a specific change in the environment. Assuming the answers are honest, the price values are an economic measure of value (NCEE, 2014).

In Ethiopia, a CV based study finds evidence supporting the feasibility of introducing community based health insurance schemes and also investigated the potential of such schemes to mitigate the impacts of health shocks due to economic reforms on poor rural households. Their findings suggest that such schemes indeed would be helpful in protecting the poor against shocks (Asfaw et al., 2005). Asenso-Okyere et al., (1997) found, in Ghana, that almost 64% of respondents were willing to pay about Cedi 000 or US\$3.00 per month for a household of five for a National Health Insurance scheme aimed at the informal sector.

In the North West region of Burkina Faso and bidding game approach was used to elicit WTP. A total of 698 heads of households was interviewed to compare heads of households' WTP for community based health insurance for themselves with their WTP for other household members using CVM. The mean WTP by heads of households for insurance for themselves (3575 FCFA) was twice their mean WTP per capital for the household as a whole (1759 FCFA). The old have a lower WTP than the young; females have lower WTP than males. The poor have a lower WTP than the rich; those with less education have a lower WTP than those with more years of education (Dong et al., 2004).

2.9 Determinants of willingness to pay for health insurance

The involvement of the community in health financing was spurred, among others, by the Declaration of Alma Ata in 1978, urging maximum community participation in organization of primary health care (Carrin et al., 2005). As a community-based health insurance becomes an important issue, some empirical studies were done by some authors to assess the WTP of households for such a scheme (Donfouet et al., 2011).

Willingness to Pay (WTP) for health and health related interventions by households and individuals is related to factors such as household demographic factors (age, sex, family size, etc); socioeconomic factors (occupation, level of education, income, etc.); and rural characteristics (nature of dwellings, distance to health facilities, etc) (Asgary et al., 2004).

A study conducted in Namibia showed that the young respondents show more interest in joining and WTP for the scheme (Asfaw et al., 2008). In a related study in Tanzania, age of household head appeared to affect WTP because seventy-four percent of respondents who were not willing to pay any amount had household heads who were aged fifty and above (Dror et al., 2007). A similar study in Ghana revealed that the premium level that individuals were willing to pay was related to age of the respondents. The younger age group was willing to pay more (Edoh et al., 2002).

Another important factor that affects WTP is gender. It was noted that males were willing to pay higher amounts for insurance than females in two different communities in Nigeria and in Ghana (Ataguba et al., 2008). Closely related to these finding is the finding in Namibia where thirty-one percent of individuals who live in male-headed households are insured compared with twenty-one percent of individuals living in female-headed households (Edoh et al., 2002). This is however different from the finding in Tanzania where seventy-eight percent of households who were not willing to pay anything for CHI had male household heads and twenty percent had female household heads. Although in this case most of the respondents who were not willing to pay any amount felt it was the government's responsibility to finance the program (Lwambo et al., 2005).

The educational level also plays a significant role. There is positive correlation between educational attainment and WTP. People with more education had a higher WTP (Ichoku et al., 2010).

The socio-economic and rural characteristics of households identify them within the community they live. This implies that these characteristics give the household social inclusion within the community. The tendency to maintain the social status and still gain community inclusion also affects households' stated amount to pay. Interactions also occur between rural characteristics and socioeconomic factors. This is because the choice of dwelling is sometimes dependent on the nature of employment and even to a greater extent on the earnings of the household (Ataguba et al., 2008).

There are studies on community health based insurance. The results are varied regarding the determinants of willingness to pay. The respondent's age is found to have a positive effect on WTP in some studies (Asenso-Okyere et al. 1997; Asgary et al., 2004); while in others, it is the reverse (Dong et al., 2003). Likewise, distance to the nearest health facility is found to have a positive effect on WTP in some cases (Asgary et al., 2004) while in other it has a negative effect (Jiang et al., 2004).

The households in the rural areas of Bandjoun, Cameroon who are more knowledgeable about community health insurance tend to be more willing to pay than their counterparts. In addition, the positive and significant coefficient of the usual means of seeking treatment implies that the household heads who regularly use the orthodox means of seeking treatment (clinics/hospitals) when they get sick are more willing to pay than those who use other means e.g. traditional healers and herbalists (Donfouet et al., 2011).

The dominant value of „science“ in a well-educated population and a wide variety of information (including from the media) may influence health care knowledge and approaches to treatment. In general, people are educated to believe in the effectiveness of western medicine. However, some still maintain their beliefs in traditional treatment methods as an integral part of their own culture, and this too may affect their health care choices and their willingness to pay for health care (Bacon et al., 2007).

2.10 Conceptual Payment Coping Mechanism for health care

Payment coping mechanisms refer to ways in which households respond to shocks from the payment mechanisms used to pay for health services e.g. use of own money, borrowed money, sale of assets, payment by subsidy or by community support. At the community level, in-kind payments have been in practice as evidenced by the mobilization of charity contributions at times of crisis following for example, death of a

community member or during events of marriage or related social occasions (Mubyazi, 2003).

The economic consequences of illness in developing countries have been the focus of increasing attention in recent years (Gertler, 2002). Households facing health shocks are often affected by both the payments for medical treatment and the income loss from an inability to work (O'Donnell et al., 2008). When measuring financial protection from such payments, coping mechanisms provide important information on how households respond to health shocks and how payment may affect their future welfare; simply looking at the ratio of health spending to household expenditure can overstate the threat to consumption and the catastrophic consequences of health payments (Flores et al., 2008).

In most developing countries, OOPS are regressive while social assistance and fee exemptions are either non-existent or where present, are not well targeted at those most in need (Nabyonga et al., 2005). The absence of exemption mechanisms and pre-paid instruments is largely responsible for impoverishing health expenditures (Preker, 2005).

Research from several studies suggested that households employ different strategies to cope with health shocks (McIntyre et al, 2006). In the short run, when medical bills exceed a household's income, households may use savings, sell assets, borrow money from friends and family, or take out a loan using collateral. Families may also alter their labour allocation decisions; if a household head falls ill, family members previously not working may begin to do so to substitute for lost income and repay loans. Formal health insurance in developing countries is rare and many households also lack access to formal credit and savings arrangements (Banerjee, 2007). A recent survey found that more than 32 million people in China (or 3% of the population) live in poverty (defined as living on less than \$1.08 per day at 1993 purchasing power parity) because of out-of-pocket spending for health care (O'Donnell et al., 2008)

The Cambodia Demographic and Health Survey in 2005 indicated that the direct costs of treatment were high. The calculations, including transportation, food, medication, and administrative, pathology and other fees, indicate that the average cost of a single illness episode was US\$15.52 for public facilities, US\$18.62 for private services, and US\$6.25 for non-medical services e.g. purchasing local drugs and/or visiting shamans, fortune

tellers, Buddhist monks and traditional healers (Cambodia Ministry of Planning and Ministry of Health, 2005).

In India and Vietnam, people similarly used cash reserves to meet most health care costs (Roy et al., 2007). In Kampong Cham (KPC), eastern Cambodia, people spent an average of US\$11.87, with 39.1% of the expenses met by wages and other cash resources, 39.6% from savings, 13.3% from formal loans and 7.8% from friends (Cambodia Ministry of Planning and Ministry of Health, 2005).

Out of pocket spending (OOPS) is the major payment strategy for healthcare in Nigeria. The real challenge of health care financing in Nigeria as in many countries in sub-Saharan Africa (SSA) lies not primarily in the acute scarcity of resources, but in the absence of intermediation and insurance mechanisms to manage risk, and inefficient resource allocation and purchasing practices (Soyibo, 2004). OOPS for healthcare increased with the introduction of user fees in the health sector and like most African countries, Nigeria introduced user fees as a mode of financing government health services within the framework of the Bamako Initiative revolving drug funds (Uzochukwu et al., 2002).

User fees fall within the broader concept of “cost sharing”, a practice whereby beneficiaries contribute towards the cost of a public service and they are defined as payment of out-of-pocket charges at the time of use of services (Witter, 2005). It is however noted that user fees and revolving drug funds are interlinked. The introduction of user fees was arguably in response to the severe problems in financing health services in Nigeria, like in most of Sub-Saharan Africa (FMOH, 2005).

Out of pocket payment mechanism for health care services is considered a major impediment to access to and use of services by households who need health care. A recent research described the absence of financial protection as “a recently diagnosed disease of health systems”. With an under five mortality rate of 200/1000 and maternal mortality ratio of 800/100,000, improvements in the health system in Nigeria would depend on improvements in the health care financing structure of the country in ways that relieve households of the financial burden of health care (Knaul et al., 2006).

2.11 Living standard and willingness to pay for VCSHI

Household members who have an illness may or may not seek care. Their action will depend on whether or not they consider the illness serious enough to seek care, the

process of seeking care, the associated costs, the perceived benefit accruable from seeking care, and the available resources that can be channeled to seeking and obtaining treatment (Uzochukwu et al., 2009). Thus, when illness occurs, some households may decide not to seek care, especially if they cannot afford the associated costs. Those that seek care incur health expenditure since they almost always have to pay out of pocket. The level of expenditure may differ for households of different socio-economic status groups depending on their access to cash (Onwujekwe et al., 2012).

In low income settings, consumption expenditure and composite indices of socio-economic status have been proposed as more reliable measures of socio-economic status (O'Donnell, et al., 2008). However the use of a composite index is limited to the analysis of the concentration of either payments or income distribution and one cannot use it to calculate distribution indices. Therefore, adult equivalent consumption expenditure was used as the measure of ability to pay in the current analysis. Household consumption expenditure was adjusted for household size and composition to get an adult equivalent estimate (Doorslaer et al., 2008).

A review published a decade ago noted the lack of attention to the ability of poor households to pay fees, and the effects of user fees on health seeking and treatment (Gilson, 1997). Subsequent studies in low and middle-income countries on the relationship between user fees and the utilization of public health services support claims that direct costs discourage presentation by poor people (McIntyre et al., 2006). In Ghana, user fees have been shown to discourage presentation for antenatal and midwifery care, and consequently contribute to continued high maternal and neonatal mortality (Witters et al., 2007). In Tanzania, despite general willingness to pay when quality of care at lower level health facilities were improved, the very poor, women and elderly were negatively affected (Bonu et al., 2003); in Niger, user fees also resulted in declining patients' attendance and variable cost recovery (Meuwissen, 2002).

In Nigeria, enrolment in some Community Health Insurance (CHI) has been low with small average premiums because of a lack of study on Willingness to pay before such schemes took off (Onwujekwe et al., 2009). Some studies reveal that households in rural areas do not readily accept the idea of paying for services they might not use with regard to health care, some other studies reveal the opposite and some communities where WTP was not carried out before the scheme revealed a high drop-out rate (Mtei, 2007).

CHAPTER THREE

METHODOLOGY

3.0 Study Area

The study was carried out in Eruwa, headquarter of Ibarapa East Local Government Area (LGA) of Oyo State. The community with an estimated population of 86,890 (Ibarapa East Local Government Eruwa National Immunisation Plus Days, 2014) people is located about 56Kilometres west of Ibadan city, the Oyo State capital, in the South-West zone of Nigeria with a longitude of 3.437655 and latitude of 7.537655. Small scale farming of food crops, petty trading and civil service are their major occupations. It comprises of six (6) political wards namely; Aborerin, Anko, Isaba, New Eruwa, Oke-Oba and Sango. Euwa has one (1) general hospital, four (4) private clinics and one (1) school clinic owned by the Ibarapa Polytechnic, Eruwa.

3.1 Study Design

This was a descriptive cross-sectional study carried out among household heads in Eruwa

3.2 Study Population

The study population consisted of household heads.

3.3 Sample size estimation

Leslie Kish formula for determining single proportion (for descriptive studies) was used to determine sample size.

$$N = \frac{Z^2 PQ}{d^2}$$

Where N =Minimum sample size

Z= Standard deviation at 95% =1.96

P= 0.3% (Proportion of people with privately purchased commercial insurance, South West Nigeria. Nigeria Demographic Health Survey 2008 (NDHS 2008)

$$Q = \text{Probability (1-P)} = 1 - 0.3 = 0.7$$

$$d = \text{Error Margin} = 5\% = 0.05$$

$$= \frac{1.96^2 \times 0.3(0.7)}{0.05^2}$$

$$= 322.69$$

10% Non-response rate

$$N = n / 1 -$$

NR Where:

N = new sample size n

= old sample size NR =

$$10\% = 0.1$$

$$N = n / 1 - NR$$

$$= 322.69 / 1 -$$

$$10\% = 322.69 / 1 -$$

$$0.1 = 322.69 / 0.9$$

$$= 358.544$$

Therefore the minimum sample size calculated is 358 approximated to 360.

3.4 Inclusion criteria

The study population was made up of household heads that are above the age 18 years and are employed or have a regular source of income.

3.5 Exclusion criteria

Ages below 18 years were excluded to avoid the additional requirement of obtaining consents from their parents. Moreover, they would most likely not have a regular job or source of income which is the crux of the study.

3.6 Sampling technique

Frame of communities developed by Local Government Planning Authority for National Immunisation Plus Days (NIPDs) was used as sampling frame.

A multistage random sampling method was adopted in the selection of households.

Based on the availability of list of communities developed by Local Government Planning Authority for National Immunisation Plus Days (NIPDs) the six wards selected for sampling.

The first stage involved the random selection of two hundred and sixteen communities across the six wards while the second stage entails the systematic sampling (balloting) of 36 households from the selected communities. This was followed by systematic random selection of 10 households in each of the selected communities. A total of 360 household heads were sampled. The total number of households studied in each ward was based on Probability Proportionate to the Size (PPS).

3.7 Data collection instrument

Data was collected using pre-tested, semi-structured interviewer administered questionnaires, designed based on the study objectives. It consists of seven sections. Section A focus on general information of the household head and section B on socio-demographic characteristics. Section C was on health seeking behaviour and cost of illness for household in the past one month while Section D focus on payment coping mechanisms of household. Section E focus on willingness to pay for VCSHI, Section F asked the amount household heads are willing to pay (Bidding game) and Section G asked questions on living standard of household (household assets/consumption patterns).

The instrument used is a standardised Interviewer Administered Questionnaire adopted and modified from National Health Insurance Scheme in collaboration with Centre for Health Economics and Development on the feasibility study on Health Insurance Scheme Survey, 2011.

3.8 Data collection procedure

The research instrument was translated to Yoruba, the predominant local language (in the community) for ease of communication and to ensure proper understanding. Household heads (respondents) were interviewed face-to-face using a pre-tested semi-structured questionnaire. Repeated visits were made to reach household heads that were not available for interview during the first visit.

3.9 Validation of the Instrument

The instrument was reviewed among experts in the department of Health Policy and Management, Community Medicine and Statistician before final administration. The instrument was pre-tested among household heads in Igbole area of Igbo Ora. This was with a view to not only ensure the quality but also to certify that the logistic arrangement for the administration and retrieval of the questionnaires.

3.10 Recruitment and Training of Interviewers

To ensure that good quality data were collected, interviewers were thoroughly trained to have the best mastery of the study. Six interviewers were recruited and trained. In order to further ensure that quality data was collected, emphasis was placed on good academic knowledge, good communication skills and ability to speak local language of the study area in the recruitment.

3.11 Data Management

Data was entered into the computer using CSpro (Census and Survey Processing System) software and analysed using STATA version 11. Frequency tables were generated and probit regression done.

Living standard categories was based on data from the household's ownership of consumer goods; dwelling characteristics; type of drinking water source; toilet facilities; and other characteristics that are related to a household's socio-economic status. Each of these assets was assigned a weight (factor score) generated through principal component analysis (PCA) and the resulting asset scores were standardised in relation to a standard normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household. Individuals were ranked according to the total score of the household in which they resided. The respondents were then grouped into quintiles from one (lowest) to five (highest) i.e. Very poor, Poor, Middle, Rich and Very rich (NDHS, 2008).

Health insurance awareness was assessed by asking the respondents "Yes or No" question. Health status of the respondents was assessed by asking the respondents about their perceived health status as Very good, good and fair.

3.12 Analytical Method

The choice of the right econometric methodology for the analysis of WTP data is debatable. There is no „standard“ way of conducting a contingent valuation study (Asgary et al., 2004). However the choice of an appropriate econometric method depends on the nature of WTP questions (Donaldson et al., 1998). In this research the iterative bidding game was used. This is one of the oldest methods of elicitation for WTP. This bidding process is common to how bidding is done during purchases in Nigeria. This helps the respondent to evaluate their preferences (Boyle and Bishop, 1988).

Initially the scenario of the voluntary contributor health insurance scheme was presented to the respondents who then evaluate this critically before providing responses to the WTP questions. In this study a fixed initial bid was used (₦ 1500). This amount is supposed to be an actuarially fair premium for the scheme. Each respondent is presented with this initial bid amount and if the respondent is willing to pay this amount, the interviewer revises this amount upwards by ₦ 100. If the respondent provides a positive response the amount is further revised upwards to ₦ 1700. If the respondent provides a positive response to ₦ 1700 then he/she is required to state the maximum amount he/she is willing to pay. At any point, apart from the initial bid, that the respondent provides a negative response, the maximum amount he/she will be willing to pay will theoretically lie in-between the intervals and the mid points were used.

If the respondent refuses the initial bid (₦ 1500), this was lowered by ₦ 100 and if the respondent still provides a negative response this is further lowered to ₦ 1300. A negative response to ₦ 1300 will require the respondent to state the maximum amount he/she will be willing to pay. If a positive response is provided for any of these questions the maximum willingness to pay of the respondent will lie between the respective intervals. This maximum amount was also obtained as the mid-point.

3.13 Ethical issues

Ethical approval was obtained from the joint U.I./UCH ethics committee, College of Medicine, University of Ibadan before the project officially commenced.

In order to protect and ensure confidentiality of the respondents, details such as age, phone numbers etc was used for the purpose of this research only. Participation in this study was entirely voluntary.

3.14 Limitation of the study

Errors during administration of the instruments were envisaged, this was minimised by ensuring adequate supervision of research assistants. Errors during data coding and entry were also reduced to the barest minimum by double-checks and cross-checks.

CHAPTER FOUR

RESULTS

A total of 360 questionnaires were administered and were completely filled analysed.

SECTION 4.0: Socio-demographic characteristics

Table 4.0 shows the socio-demographic characteristics of respondents.

The mean age was 38.2 ± 2.7 years. About a third (33.4%) were 30-39 years old. Males were in the majority which is 94.7% and 82.6% were married. About half of the respondents 51.4% had secondary school education. Children of the respondents accounted for 48.35% while 1.87% were relatives.

Table 4.0: Socio-demographic characteristics of respondents (N =360)

| Variables | Frequency (n) | % |
|-----------------------|----------------------|----------|
| Sex | | |
| Male | 337 | 94.7 |
| Female | 19 | 5.3 |
| Age group | | |
| 10-19 | 1 | 0.3 |
| 20-29 | 87 | 24.4 |
| 30-39 | 119 | 33.4 |
| 40-49 | 83 | 23.3 |
| 50 above | 65 | 18.3 |
| Marital Status | | |
| Married | 294 | 82.6 |
| Single | 12 | 3.4 |
| Separated | 8 | 2.2 |
| Widow/widower | 6 | 1.7 |
| Education | | |
| Non-formal education | 58 | 6.3 |
| Primary | 30 | 8.4 |
| Secondary | 183 | 51.4 |
| Higher | 85 | 23.9 |

SECTION 4.0: Socio-demographic characteristics of respondents (cont'd)

| Variables | Frequency (n) | % |
|-------------------|----------------------|----------|
| Dependants | | |
| Spouse | 229 | 22.41 |
| Children | 665 | 48.35 |
| Grandchildren | 7 | 0.52 |
| Relatives | 25 | 1.87 |
| Non-relatives | 2 | 0.15 |

SECTION 4.1: Occupation of the respondents

Table 4.1 presents the occupation of the respondents. Trading/Sales accounted for 35.9% followed by construction which was 19.0%.

(N=360)

| Variables | Frequency (n) | % |
|--------------------|----------------------|----------|
| Trading/Sales | 196 | 35.9 |
| Construction | 53 | 19.0 |
| Agriculture | 52 | 14.6 |
| Transportation | 47 | 13.2 |
| Teaching | 22 | 6.2 |
| Civil service | 8 | 2.2 |
| Healthcare workers | 8 | 2.2 |

SECTION 4.2: Respondents' perceived health status

The Figure 4.1 below shows the perceived current health status of the respondents. The proportion of respondents that rated their health status to be very good were 83.5% while 4.4% perceived their health status to be fair.

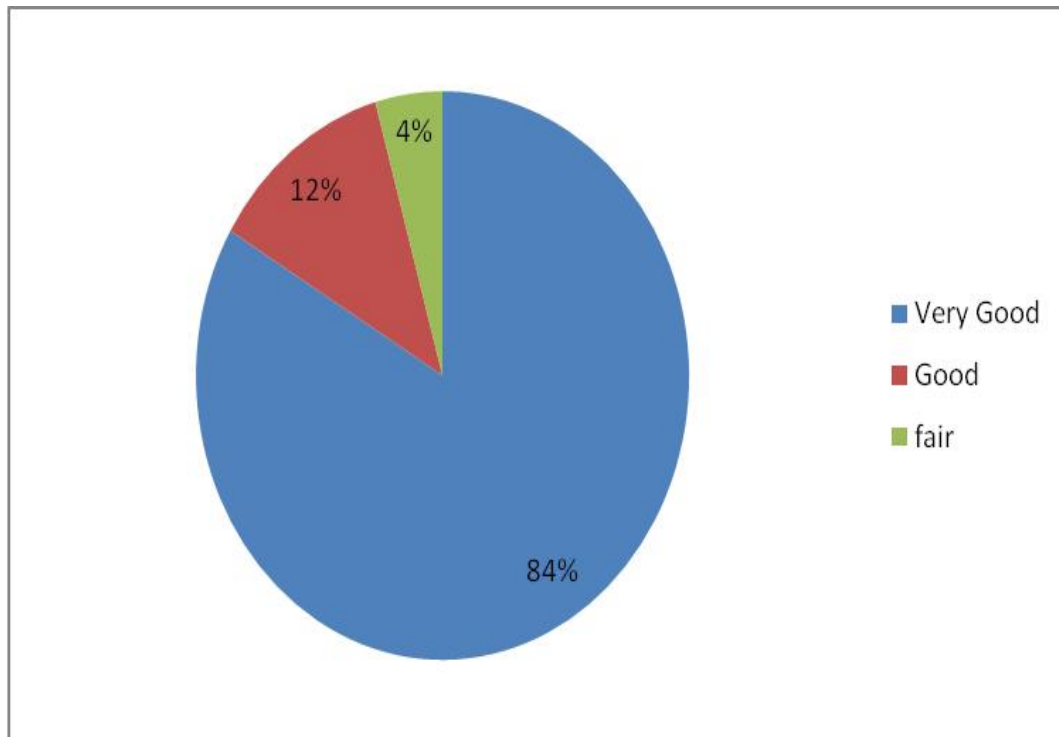


Figure 4.1: Perceived health status of respondents

SECTION 4.3: Health problems reported in the households

The table 4.2 below shows reported health problems in the past one month (*single response*). Malaria was the commonest health problem, accounting for approximately 35.5% of the illnesses followed by typhoid and diarrhoea which constituted 4.7% and 2.2% respectively. Other illnesses which were undisclosed accounted for 8.4%.

Table 4.2: Health problems reported in the past one month

| (N=360) | | |
|------------------|----------------------|----------|
| Variables | Frequency (n) | % |
| Malaria | 127 | 35.5 |
| Typhoid | 17 | 4.7 |
| Diarrhoea | 8 | 2.2 |
| Others | 30 | 8.4 |

SECTION 4.4: Respondents' first places of treatment

Table 4.3 highlights first place of choice for treatment; 33.3 % of the respondents indicated public general hospital or clinic, chemist/patent medicine store in 23.0% , private clinic (16.1%), primary health centre (11.5%), home medication (9.8%), traditional healer (5.7%) and community health worker (0.6%).

Table 4.3: Places where households first sought treatment in the past one month

| | (N=174) | |
|-------------------------------|----------------------|----------|
| Variables | Frequency (n) | % |
| Public (General) hospital | 58 | 33.3 |
| Chemist/patent medicine store | 40 | 23.0 |
| Private hospital or clinic | 28 | 16.1 |
| Primary Health Centre | 20 | 11.5 |
| Home/Self care | 17 | 9.8 |
| Traditional healer | 10 | 5.7 |
| Community health worker | 1 | 0.6 |

SECTION 4.5: Respondents' distance to reach a location for treatment

Majority of the respondents (70.52%) took less than 15 minutes while (27.17%) took 15-30 minutes to reach a location of treatment.

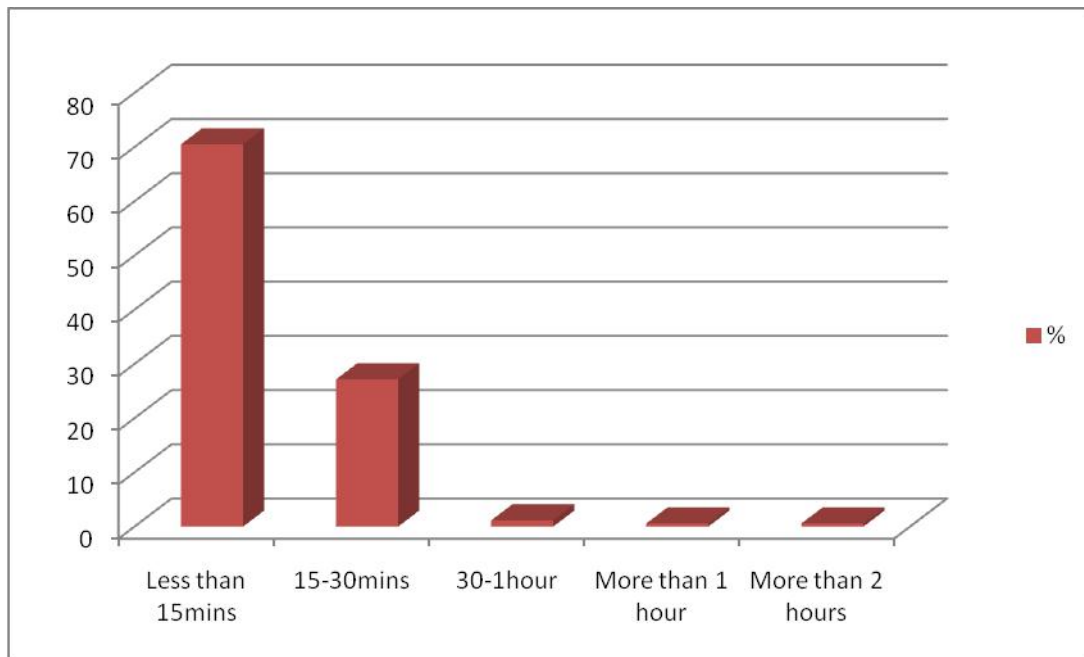


Figure 4.2: Distance to reach a location for treatment

SECTION 4.6: Respondents' treatment receiving time

On the average, it took very large proportions of respondents (58.62%) less than 15 minutes to receive treatment.

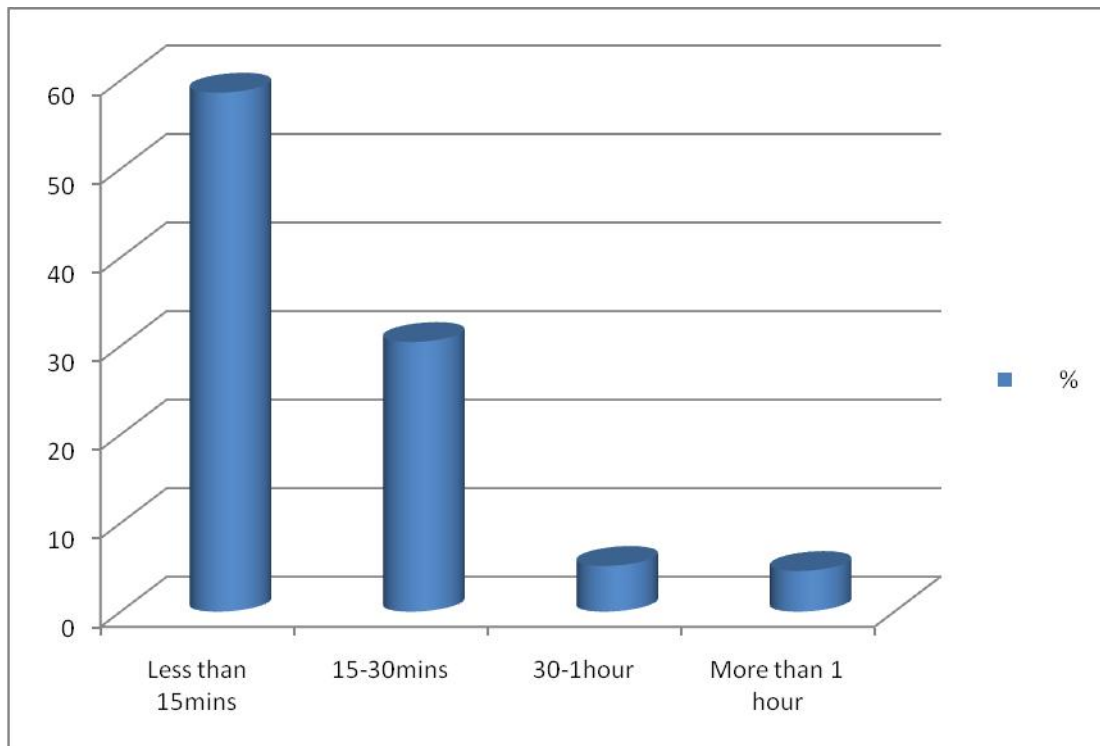


Figure 4.3: Treatment receiving time

SECTION 4.7: Payment coping mechanisms of respondents

Table 4.4 shows the distribution of the payment of treatment in the household especially as it relates to Out of pocket, borrowed money/loan, payment subsidized, community solidarity, in-kind and sales of household assets or land. Methods of payment for treatment by the respondents are as follows: out-of-pocket (OOP) expenditures (94.25%), borrowed money (0.57%) and in-kind payment (4.6%).

Table 4.5: Payment coping mechanisms of respondents

| Variables | Frequency (n) | % |
|------------------|----------------------|----------|
| Out of Pocket | 164 | 94.25 |
| In-kind | 8 | 4.6 |
| Borrowed/Loan | 1 | 0.57 |

*In-kind: use of a good or service instead of cash

SECTION 4.8: Respondents' awareness about health insurance

Figure 4.4 below shows the respondents' awareness of health insurance. The proportion that were not aware of health insurance were 71% while 29% were aware about health insurance.

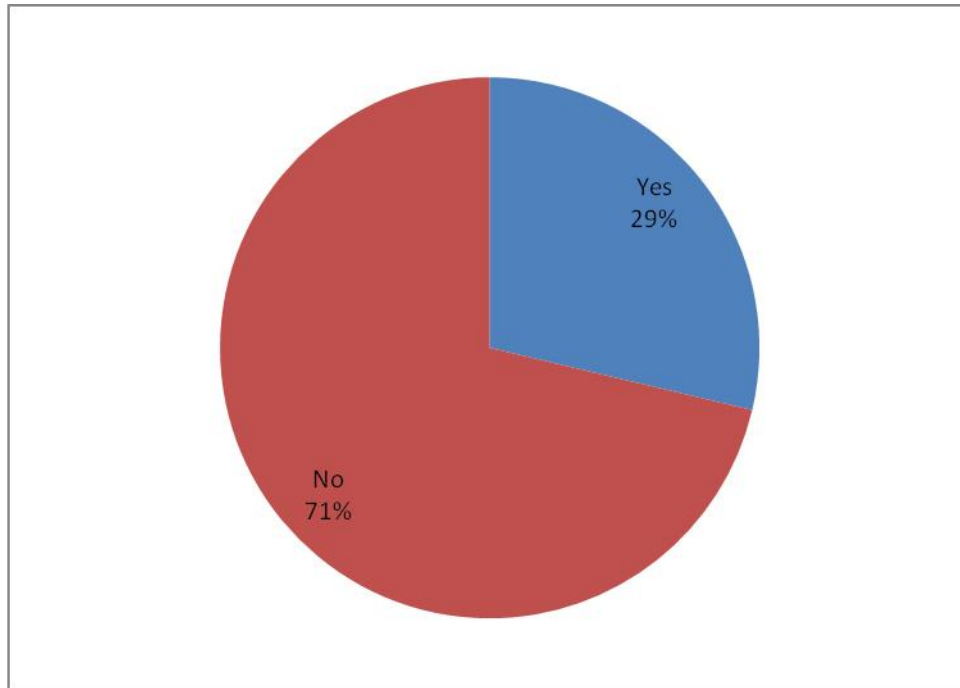


Figure 4.4: Respondents' awareness about health insurance

SECTION 4.9: Respondents' willingness to pay

Figure 4.5 below shows respondents' willingness to pay for the health insurance. The proportion of respondents that were willing to pay were 278 (77%), 78 (22%) indicated no and 4 (1%) were indecisive.

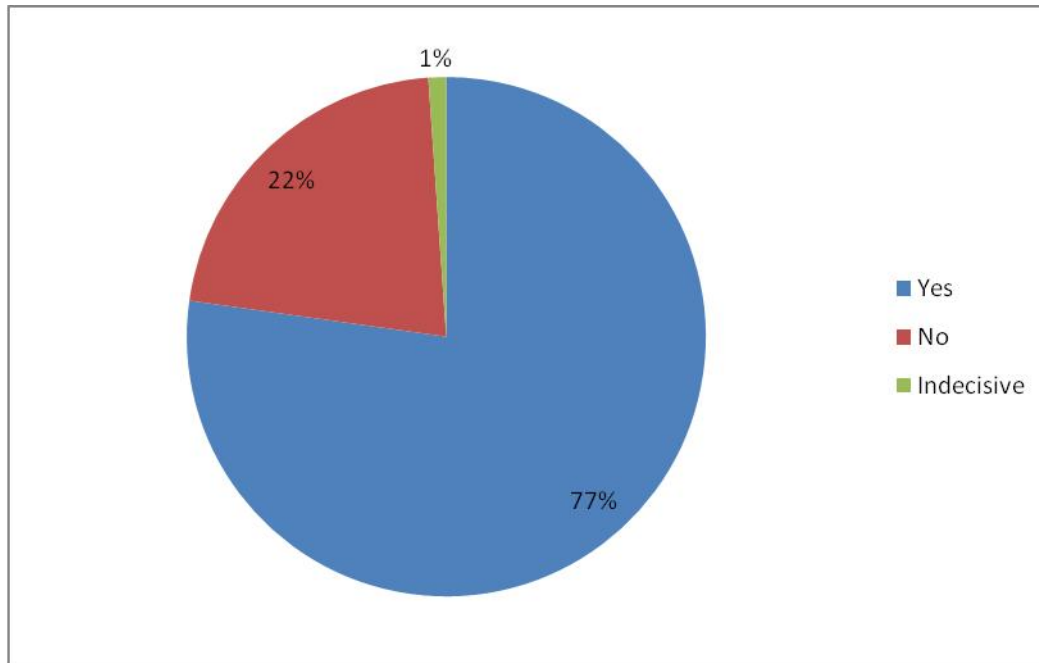


Figure 4.5: Respondents' willingness to pay for the health insurance

SECTION 4.10: Amount (Naira) respondents are willing to pay for the Voluntary Contributor Social Health Insurance

Table 4.6 summarises the premiums households preferred. Majority of the households (77.23%) were willing to pay premium of between ₦200 and ₦500 per month per household member. Only 14.17% were willing to pay less than ₦200.

Table 4.6: Amount respondents are willing to pay

| (N=360) | | |
|--------------------------|----------------------|----------|
| WTP range (Naira) | Frequency (n) | % |
| <₦ 200 | 51 | 14.7 |
| ₦ 200-599 | 278 | 77.23 |
| ₦ 600-999 | 17 | 4.73 |
| ₦ 1000+ | 14 | 3.89 |

SECTION 4.11: Distribution of Living Standard of Households

The living standard of households is shown in table 4.7. The poor were the highest (21.7%).

| Living Standard | Frequency | (N=360) % |
|------------------------|------------------|----------------------------|
| Very Poor | 72 | 20.0 |
| Poor | 78 | 21.7 |
| Middle | 67 | 18.6 |
| Rich | 71 | 19.7 |
| Very Rich | 72 | 20.0 |

Key

| | |
|-----------|---|
| Very Poor | 1 |
| Poor | 2 |
| Middle | 3 |
| Rich | 4 |
| Very Rich | 5 |

SECTION 4.12: Association between respondents' average amount and their living standard

Table 4.8 shows that respondents in the rich, middle and poor class were willing to pay a median of N500, N400 and N400 respectively per household member per month. The overall median amount is N350 per household member per month

Table 4.8: Distribution of households by average amount respondents were willing to pay and Living Standard

| Living standard | Mean (Naira) | 95% CI (in Naira) | | Median |
|------------------------|---------------------|--------------------------|--------------|---------------|
| | | Lower | Upper | |
| Very Poor (20%) | 285.4 | 242.8 | 328.0 | 200 |
| Poor (20%) | 355.1 | 303.9 | 406.3 | 400 |
| Middle (18%) | 365.7 | 316.9 | 414.4 | 400 |
| Rich (19%) | 392.3 | 338.6 | 446.0 | 500 |
| Very Rich (20%) | 405.6 | 349.1 | 462.0 | 500 |

SECTION 4.13: Reasons households are unwilling to contribute towards the health insurance

Figure 4.6 presents the reasons why household would not be willing to pay. Financial constraints accounted for 60.49% which was followed by lack of trust (19.75%).

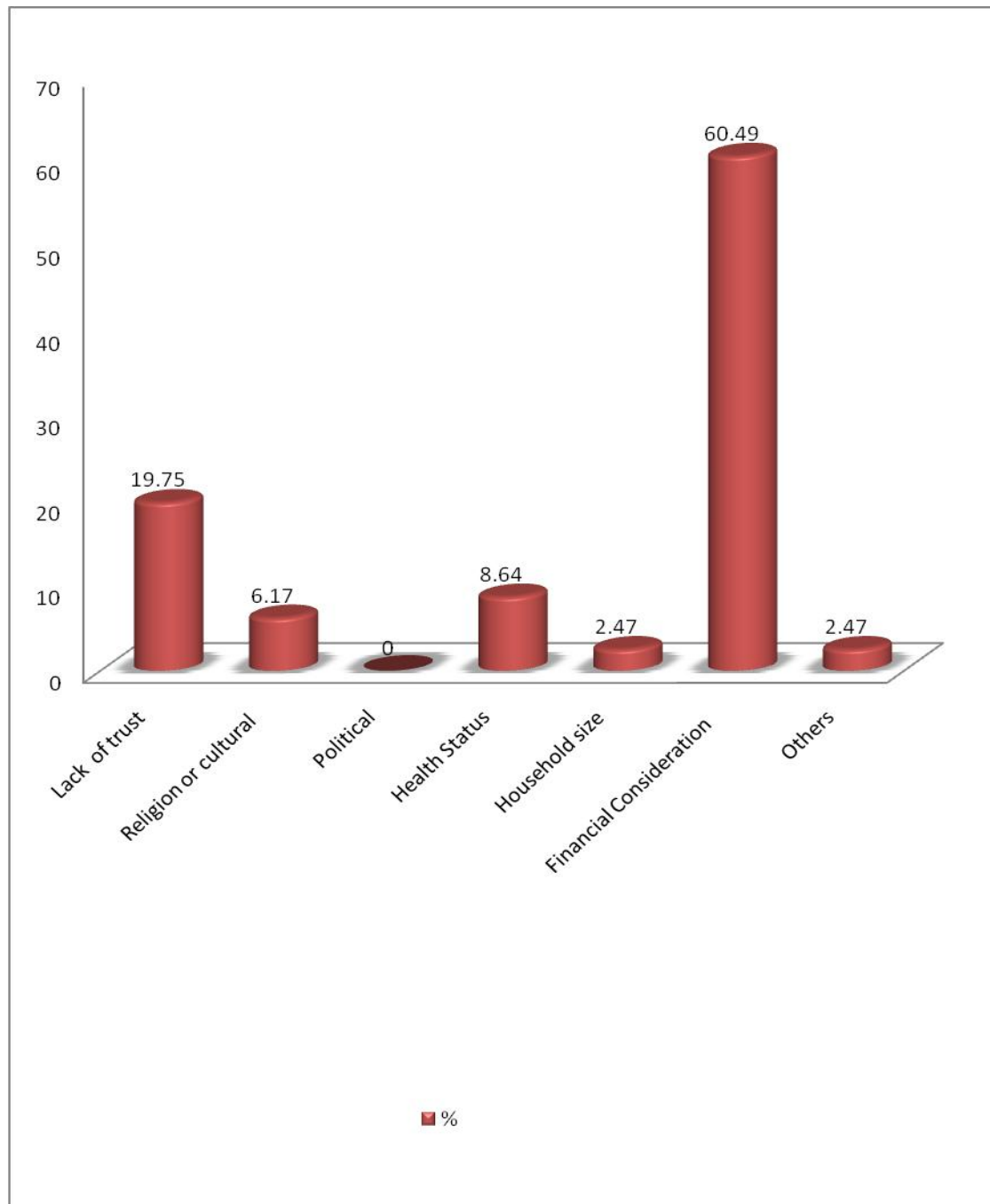


Figure 4.6: Reasons households are unwilling to contribute towards the health insurance

SECTION 4.14: Determinants of Willingness to Pay

Table 4.9 shows the probit regression. The selection estimates are simple probit estimates that show the factors that predict households' likelihood of being willing to pay. Household size, health status, living standard and expenses on food have positive correlation with willingness to pay while sex, age, marital status, occupation of the respondents does not have correlation with their willingness to pay.

Table 4.9: Determinants of willingness to pay

| Variables | Coefficient | Standard error | Z | P> Z | 95% CI | |
|-------------------------|-------------|----------------|-------|--------|-----------|-----------|
| Household size | .0414694 | .0093543 | 4.43 | 0.000* | .0231178 | .0598209 |
| Sex | -.02295 | .0258474 | -0.89 | 0.375 | -.0736583 | .0277583 |
| Age | -.0003207 | .0014762 | -0.22 | 0.828 | -.0032167 | .0025754 |
| Marital status | -.0058902 | .0149621 | -0.39 | 0.694 | -.0352434 | .023463 |
| Education | .0031918 | .0160835 | 0.20 | 0.843 | -.0283613 | .0347449 |
| Occupation | -.0001357 | .0036389 | -0.04 | 0.970 | -.0072747 | .0070032 |
| Health status | -.0383078 | .0174401 | -2.20 | 0.028* | -.0725224 | -.0040932 |
| Living standard | -.0613954 | .0091388 | -6.72 | 0.000* | -.0793242 | -.0434666 |
| Expenses on food | -5.89e-06 | 1.22e-06 | -4.84 | 0.000* | -8.27e-06 | -3.50e-06 |

*Note: * Significant at 95% CI*

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The key dimension of a health system's performance is how fairly it protects households financially (WHO 2000). While "fairness in financial protection" has been a long standing controversy, there are evidences that payments for health care can affect people's ability to seek health care when ill. It is also possible that linking health care payment to ability to pay can be interpreted in terms of vertical and horizontal equity (Wagstaff 2001).

The enormous share of out of pocket as a method of health payment from this research result confirms the immense burden on households to pay for health treatment. This is consistent with the National Health Accounts 2003 – 2005 estimates for Nigeria that shows that about 70 percent of the total expenditure on health is through out-of-pocket payments by households. The results of this study have shown that people are very enthusiastic about joining in the voluntary contributor social health insurance.

5.1 Willingness to pay and the living standard of the households

This research shows that majority (77%) were willing to pay for the health insurance. The respondents indicated willingness to pay premium of between N200 – N500 per month per household member. Only few were willing to pay less than N150. In a similar study on WTP for a school based chemotherapy program in Tanzania, greater than seventy percent had WTP greater than 1.25 US Dollars (which is roughly N210) per person per year (Lwambo et.al., 2005), Donfouet et. al., 2011 also found rural households in Cameroon willingness to pay an average amount of 2.15 USD (roughly N360) per household member per month. Another study in Nigeria also gives a WTP of 1.5 USD (roughly N250) per household per month (Ichoku et. al., 2011). Also a research conducted in Nigeria found WTP of 1.7 USD (roughly N280) per person per month in a rural community while he found a WTP of 2.9 USD (roughly N480) per person per month in the urban area (Onwujekwe et. al.,2012).

Considering the living standard of the respondents (household heads), very rich people of about 20% were willing to pay an average amount of N405 (which is the highest) per household member per month to enrol in the VCSHI. Also considering the living standard, the very poor which accounted for 20% are willing to pay an average of N285

(lowest) per household member per month compared to N355, N365 and N392 by household heads from poor (21%), Middle (18%) and rich (19%) class respectively. In total, surveyed household heads are willing to pay an average of N360 per month per member. This information is pertinent to the setting of premiums that will not exceed the amount households can afford to pay.

Similar to this is a study in North West Burkina Faso with a random sample of 698 heads of households (Dong et. al., 2003) where Contingent Valuation Method was used to compare heads of households' WTP for community based health insurance for themselves with their WTP for other household members. The poor have a lower WTP than the rich. In rural Iran, Asgary et. al., (2004) also researched on the WTP for health insurance, and it was shown that households were willing to pay on average USD 2.77 (N456) per month for health insurance. Another study in rural Cameroon by Donfouet et. al., 2011 also confirmed that the mean WTP is approximately USD 2.15 (354) per person per month. Lastly, Bateman et. al., (2002) also examine willingness to pay for community health insurance and found the lower bound of the mean to be USD 1.4 (N230) per month per household member.

This research clearly shows that majority (77%) were willing to pay premium of ₦200 – ₦500 per individual per month to join the health insurance scheme. Hence, it turns out from this study that there is a potential demand for the health insurance. Hence, this type of low-cost health insurance scheme can be well accepted in rural areas and has the potential to protect the rural households from any health risks. This information is crucial for the policymakers to set premiums that will not exceed the amount households in rural areas can afford to pay.

5.2 Reported health problems and payment coping strategies

This study shows that malaria (35.5%) was the main illness suffered by most of the respondents buttressing the fact that it is one of the main causes of morbidity and mortality in Nigeria accounting for 50% of outpatient consultations, 30% of childhood mortality and 11% of maternal mortality (FMOH, 2005). Diseases such as malaria constitute major reasons for health care seeking among households in Nigeria and thus health care expenditure (FMOH, 2005). The high illness burden and the variations in the frequency of occurrence of common communicable diseases amongst individuals and

households of various geographic and socio-economic status groups have also been documented by several studies (Uzochukwu et al., 2009). Coincidentally, poorer populations might have illness episodes but rather than reporting it, might say that they are not ill, may overlook symptoms or may seek cheaper care from patent medicine dealers and shopkeepers (Onwujekwe et al., 2012).

Studies have shown that some households are able to cope with the cost of illness by reducing consumption, selling assets, and borrowing from family and friends (Kabir et al., 2000). A recent research found that coping strategies employed by households could provide up to three-quarters of the costs associated with in-patient care (Flores et al., 2008).

Table 4.5 shows the different payment coping mechanisms that the respondents used to pay for health care. From this research, it shows that Out of pocket payment (94.25%) was the commonest payment coping mechanism. The other payment mechanisms like loan and in-kind were not used so much. It was not surprising that taking a loan was not a popular coping mechanism adopted by the respondents. The reason may be that formal credit institutions employ screening devices to overcome information and incentive problems and this often results in the exclusion of poor households from access to formal credit (Hoff et al., 1990).

Many households with the capacity to obtain loans may be unwilling to seek formal loans to pay medical bills due to high interest rate and the fear that they may find it difficult to repay the loans in the future. Similarly, community solidarity was not a popular coping mechanism even though it has been reported that it can overcome information asymmetries and incentive problems and as such can be used as informal credit market to households who are excluded from formal credit institutions (Fafchamps, 1992).

This points to inequity in the use of out of pocket payment because in an equitable system, protective mechanisms should be in place to prevent the poor and rural dwellers from such a regressive payment mechanism (WHO 2011).

This shows the huge financial burden created by ill health and the implications of health care payments when households have to finance health care payments. This burden is created because health care payments are usually forced payments since there is the desire to get well immediately.

5.3 Factors influencing the willingness to pay for Voluntary Contributor Social Health Insurance

The results of the selection or probit estimation for household willingness to pay (WTP) are presented in Table 4.8. The selection estimates are simple probit estimates that show the factors that determine households' likelihood of willing to pay for the health insurance. As this table shows, household size has a positive and statistically significant impact on WTP. Households with larger sizes are willing to pay amounts that are generally less than those with fewer sizes. Closely related to these finding is the finding where households with smaller sizes were willing to pay highest premium while the ones with larger sizes expressed lower WTP (Asfaw et al., 2008). This is particularly because such payment is per household member. Larger households will be required to make more payments based on their size than smaller households. Because the overall amount will be large, they may be unable to cover this cost for all household members.

Sex of the household heads does not have correlation with WTP. This is in conformity with a study also conducted in Tanzania (Lwambo et al., 2005) where 78% of households who were not willing to pay anything for Community Health Insurance had male household heads and 20% had female household heads.

Furthermore, the coefficient of age is another determinant which does not have correlation with the WTP. Similar to this is a study conducted in Tanzania (Asgary, 2004) where age of household head showed to affect the WTP.

Other factors such as marital status, occupation and education indicator variables do not have a significant effect on the willingness to pay. This is however different from previous research (Asfaw et. al., 2008) where the aforementioned variables have positive correlation with willingness to pay for health insurance.

Health status also influenced the willingness to pay (Table 4.8). Households with good health status were willing to pay far more higher than the ones with less health status. Similarly to this is a study where health status of households has significant effect on their willingness to pay for health insurance (Ataguba et. al., 2008). This study implies that household heads that report good health were willing to pay for the health insurance. This indicates that willingness to pay is related ability to pay. However, this indicates lack of risk cross-subsidisation and this is not surprising because the rich could afford payment while the poor may not be able to afford.

The coefficient related to living standard has positive impact and statistically significant on the willingness of households to pay. Richer households are willing to pay higher amounts than the poor. Closely related to these finding is a research recently conducted where less wealthy households or individuals were willing to pay lesser amounts (Ichoku et. al., 2010).

The higher the income, the greater the likelihood that people would be willing to pay, confirming economic theory and other literature that assert that the ability to pay and WTP are closely related. Another study done in the eastern part of Nigeria in 2009 showed that the willingness to pay is linked with the socioeconomic status (Onwujekwe et al., 2012). This result is not surprising because the rich could afford payment while the poor may not be able to afford. This indicates that willingness to pay is related to households' living standard.

The implication of the finding suggests that income of the rural dwellers has a positive and consistent significant impact on the willingness to pay; this further implies that the more the income of the household heads increases, the more they are willing to pay for the health insurance.

5.4 Implication of the findings

The implication of these research findings is not limited to the rural health sector. It suggests that contingent valuation method may show to be a practicable method of collecting information on individual's willingness to pay for public health services in developing countries.

The results of the study provided evidence for policymakers in expanding financial protection to millions of Nigerians that are presented uninsured especially the rural dwellers. It also indicated a potential demand for health insurance across the country. From the analysis, there is high level of willingness to enrol and pay by households. However, the issue of affordable price is still a challenge to guarantee the minimum size of enrolees that will be required for financial sustainability of the programme.

5.5 Conclusion

The results of this study have shown that people are willing to join and pay for the voluntary contributor social health insurance. The amounts indicated by the respondents should be viewed as only evidence to support the hypothesis that the rural dwellers are willing to pay and not as the exact amounts, they will be able to pay at time of implementation. One of the major barriers to paying for the scheme is access to financial means of payment. Majority of the study population were willing to pay less than N500 per individual per month to join.

This research study provided evidence for health policy makers in expanding financial protection to millions of Nigerians that are presently uninsured. It also indicated a potential demand for health insurance by rural dwellers. The analysis presented that there is high level of willingness to pay for VCSHI by households. Though, the issue of affordability is still a challenge to guarantee the minimum size of enrollees that will be required for financial maintenance and sustainability of the programme.

In Nigeria, payment for health care is predominantly through out of pocket. Such payments place heavier burdens on the poor compared to the rich. In fact in many countries, several people are impoverished by out of pocket payments. In response to the huge burden created by out of pocket payments, several countries have started making provisions to cover their population. Such provisions are usually couched in terms of health insurance schemes, programmes or system. Nigeria is not an exception in this regard. Health insurance is expected to serve as an alternative to direct out of pocket payments such that people do not have to pay for health care at the point of utilization. The implied importance of health insurance usually spurs up people's interest in joining.

5.5 Recommendation

Based on this study the following are recommended:

1. There is the need for proper awareness creation about health insurance. This can be addressed by involving traditional chiefs and other stakeholders.
2. Subsidy should be given to the very poor who may not be able to access health care services given their low level of income.

3. It is also recommended that effective mechanisms should be in place to prevent inappropriate behaviour – moral hazard and adverse selection – on the supply side of health insurance market.

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| | | |
|---|---|---|
|  | INSTITUTE FOR ADVANCED MEDICAL RESEARCH AND TRAINING (IAMRAT) COLLEGE OF MEDICINE, UNIVERSITY OF IBADAN. IBADAN, NIGERIA. Director: Prof. A. Ogunniyi, B.Sc(Hons), MBChB, FMCP, FWACP, FRCP (Edin), FRCP (Lond) Tel: 08023038583, 08038094173 E-mail: aogunniyi@comui.edu.ng |  |
| UI/UCH EC Registration Number: NHREC/05/01/2008a | | |
| NOTICE OF FULL APPROVAL AFTER FULL COMMITTEE REVIEW | | |
| Re: Willingness to Pay for Voluntary Contributor Social Health Insurance in Eruwa, Oyo State | | |
| UI/UCH Ethics Committee assigned number: UI/EC/14/0094 | | |
| Name of Principal Investigator: Samuel O. Ojezele | | |
| Address of Principal Investigator: Department of Health Policy & Management, College of Medicine, University of Ibadan, Ibadan | | |
| Date of receipt of valid application: 18/03/2014 | | |
| Date of meeting when final determination on ethical approval was made: 17/07/2014 | | |
| This is to inform you that the research described in the submitted protocol, the consent forms, and other participant information materials have been reviewed and <i>given full approval by the UI/UCH Ethics Committee.</i> | | |
| This approval dates from 17/07/2014 to 16/07/2015. If there is delay in starting the research, please inform the UI/UCH Ethics Committee so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. <i>All informed consent forms used in this study must carry the UI/UCH EC assigned number and duration of UI/UCH EC approval of the study.</i> It is expected that you submit your annual report as well as an annual request for the project renewal to the UI/UCH EC early in order to obtain renewal of your approval to avoid disruption of your research. | | |
| <i>The National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations and with the tenets of the Code including ensuring that all adverse events are reported promptly to the UI/UCH EC. No changes are permitted in the research without prior approval by the UI/UCH EC except in circumstances outlined in the Code. The UI/UCH EC reserves the right to conduct compliance visit to your research site without previous notification.</i> | | |
|  | | |
| Professor A. Ogunniyi Director, IAMRAT Chairman, UI/UCH Ethics Committee E-mail: uiuchirc@yahoo.com | | |
| ▪ Drug and Cancer Research Unit Environmental Sciences & Toxicology ▪ Genetics & Cancer Research ▪ Molecular Entomology ▪ Malaria Research ▪ Pharmaceutical Research ▪ Environmental Health ▪ Bioethics ▪ Epidemiological Research Services ▪ Neurodegenerative Unit ▪ Palliative Care ▪ HIV/AIDS | | |

WILLINGNESS TO PAY FOR VOLUNTARY CONTRIBUTOR SOCIAL HEALTH INSURANCE IN ERUWA, OYO STATE, NIGERIA

I am Ojezele Samuel, a Master student of the Department of Health Policy and Management in the Faculty of Public Health, University of Ibadan. I am conducting a study on Willingness to pay for voluntary contributor social health Insurance.

I would like to ask you some questions, which will take a few minutes of your time. Information given by you will be treated with confidentiality and will not have any impact on the care you will receive at any health facility. However, your candid answers to the following questions will be appreciated. You may choose to participate or not to and as a participant, you may choose to also withdraw at any time without any harm to you.

Thank you for your anticipated cooperation.

Would you like to participate?

Yes=1, No=2 (if No stop interview) []

GENERAL INFORMATION

A1. Ward Name: _____
Code [][]

A2. Household Size [][]

A3. Date of Interview []/[]/[]

SECTION B: SOCIO-DEMOGRAPHIC CHARACTERISTICS

| L/No | Sex of Usual residents | Relationship | Age | Marital Status | Highest level of school | List of Code |
|-----------------|--|---|---|---|---|---|
| B1 | B2 | B3 | B4 | B5 | B6 | Code 1 |
| Members line No | Please indicate the sex of the persons who usually live in your household. Male=1 Female=2 | What is the relationship to Head of Household (see code 1) | How old in completed years? <i>Record "0" if <1yr If age≥95 record 95</i> | What is the present marital status? 1=Married 2=Separated 3=Divorce 4=Single 5=Widow/widower | What is the highest level of school attended? (see code 2) | 01. Head, 02. Spouse 03. Own child 04. Step child 05. Grandchild 06. Parent 07. Relatives 08. Maid/Nanny/House servant 09. Non-relatives Code 2 00 Preschool 01 Primary 02 Secondary 03 Higher Education 04 Non-Formal 05 Don't Know |
| [01] | [] | [][] | [][] | [] | [][] | |
| [02] | [] | [][] | [][] | [] | [][] | |
| [03] | [] | [][] | [][] | [] | [][] | |
| [04] | [] | [][] | [][] | [] | [][] | |
| [05] | [] | [][] | [][] | [] | [][] | |
| [06] | [] | [][] | [][] | [] | [][] | |
| [07] | [] | [][] | [][] | [] | [][] | |
| [08] | [] | [][] | [][] | [] | [][] | |
| [09] | [] | [][] | [][] | [] | [][] | |
| [10] | [] | [][] | [][] | [] | [][] | |
| [11] | [] | [][] | [][] | [] | [][] | |

| Ln0 | Occupational sector | Health Status | | |
|--------------------|---|---|--|---|
| B1 | B7 | B8 | B9 | |
| Members line No | What is the main occupation? (see code 4) | How will you generally rate your state of health now? E xcellent =1, Very good=2, Good=3, Fair=4, If No, go to Next Person Poor=5 | Do you know what a health insurance scheme is? Yes... 1 No....2 | Code 4 01. Agric, Hunting & Forestry 02. Fishing 03. Mining 04. Manufacturing 05. Electricity, Gas & Water Supply 06. Construction 07. Wholesale & Retail Trade 08. Hotels & Restaurants 09. Transport, Storage & comm. 10. Financial Intermediation 11. Real Estate, Renting & Business 12. Public Administration & Defense 13. Education 14. Health & Social Work 15. Social & Personal Services 16. Student 17. Others |
| [01] | [][] | [] | [] | |
| [02] | [][] | [] | [] | |
| [03] | [][] | [] | [] | |
| [04] | [][] | [] | [] | |
| [05] | [][] | [] | [] | |
| [06] | [][] | [] | [] | |
| [07] | [][] | [] | [] | |
| [08] | [][] | [] | [] | |
| [09] | [][] | [] | [] | |
| [10] | [][] | [] | [] | |
| [11] | [][] | [] | [] | |

SECTION C: HEALTH SEEKING BEHAVIOUR AND COST OF ILLNESS FOR HOUSEHOLD

| Qno | Question | Options | Recording box |
|------------|---|---|----------------------|
| C1 | What was the most recent type of sickness or poor health condition in this household within the past one month? | | |
| C1a | Malaria | Yes=1, No =2 | [] |
| C1b | Typhoid | Yes=1, No =2 | [] |
| C1c | Diarrhea | Yes=1, No =2 | [] |
| C1d | Other (specify) | Yes=1, No =2 | [] |
| C2 | Where did he/she first seek treatment? <i>Interviewer: Do not read list. Mark first response only]</i> | | |
| C2a | Traditional healer | Yes=1, No =2 | [] |
| C2b | Home/Self Medication | Yes=1, No =2 | [] |
| C2c | Chemist /patent medicine store | Yes=1, No =2 | [] |
| C2d | Community health worker | Yes=1, No =2 | [] |
| C2e | Primary Health center | Yes=1, No =2 | [] |
| C2f | Public (general) hospital or clinic | Yes=1, No =2 | [] |
| C2g | Private hospital or clinic | Yes=1, No =2 | [] |
| C2h | Other (Specify) | Yes=1, No =2 | [] |
| C3 | What form of transportation did him/her use to reach the location to obtain treatment? | | |
| C3a | Personal vehicle | Yes=1, No =2 | [] |
| C3b | Bus (public transport | Yes=1, No =2 | [] |
| C3c | Taxi | Yes=1, No =2 | [] |
| C3d | Okada | Yes=1, No =2 | [] |
| C3e | Walked | Yes=1, No =2 | [] |
| C3f | Others (specify) | Yes=1, No =2 | [] |
| C4 | How long did it take to get to the location of treatment | Less than 15mins = 1 15-30mins = 2, 30-1hour = 3 More than 1 hour = 4 More than 2 hours =5 | [] |
| C5 | How long did it take to receive treatment? | Less than 15mins = 1 15-30mins = 2, 30-1hour = 3 More than 1 hour = 4 More than 2 hours =5 | [] |
| C6 | How much was spent on transportation to receive this treatment (to and fro)? | Record Amount | [] |
| C7 | How much did it cost to receive this treatment (including cost of registration/card, cost of drugs, laboratory tests, x-rays, etc)? | Record Amount | [] |
| C8 | How would you generally rate the quality of care at the health facility? | Excellent =1, Very good=2, Good=3, Fair=4, Poor=5 | [] |

SECTION D: PAYMENT AND PAYMENT COPING MECHANISM

| Q/No | Question | Options | Recording box |
|------------|---|--------------|---------------|
| D1 | How was the treatment paid for? <i>Enumerator: Multiple responses are allowed</i> | | |
| D1a | Out-of pocket | Yes=1, No =2 | [] |
| D1b | Borrowed money/took a loan | Yes=1, No =2 | [] |
| D1c | Sold household movable assets or land | Yes=1, No =2 | [] |
| D1d | Payment was subsidized | Yes=1, No =2 | [] |
| D1e | Installment | Yes=1, No =2 | [] |
| D1f | Community solidarity/someone else paid | Yes=1, No =2 | [] |
| D1g | In-kind | Yes=1, No =2 | [] |
| D1h | Others (specify) | Yes=1, No =2 | [] |

SECTION E: WILLINGNESS TO PAY FOR VCSHI

Scenario for Eliciting WTP for Voluntary Contributors Health Insurance Scheme

(Interviewer: Now, I would like to ask you about your level of WTP for a proposed voluntary contributors health insurance scheme for yourself and other family members).

Most of the time when people fall sick, they tend to adopt various ways of coping with such an event this includes selling off of personal belongings such as animals, electronic gadgets, and if intense, land and landed property. Sometimes also, households tend to resort to borrow money from their neighbors, the religious organization or friends. This is because there is always a desire to get better again and if possible, quickly. If the individual or household fails in obtaining financial help, often times the sick individual has no option than to remain in the state and begin to deteriorate. Others decide at this point to go for cheaper alternatives, which might not be efficacious such as the use of traditional healers and medical practitioners. The scenario is also worse if the family finally obtains financial assistance only to discover at that point that the sick individual has given up.

Now, considering the financial burden and other risks you (household and individuals) might face, voluntary contributor health insurance scheme for your household which will help solve the problem of sourcing money especially when an individual falls ill. When this scheme is instituted, and you join, you will then be expected to pay a certain amount as premium. If you pay the premium, you will not pay for the following services offered you/your household at any public/private health facility for the period of a year. These include: *Outpatient care + consumables, Prescribed drugs + pharmaceutical care (10% co-payment), Diagnostic tests (Lab + X-ray), Maternity care (four live births), Consultation with specialists, Eye examination, tests and care, Preventive dental care and pain relief, Physiotherapy services, Immunization, family planning, ante and post natal care, Emergency care/Health education, Locally made prostheses/rehabilitation/mental health.*

| Qno | Question | Options | Recording box |
|-----|---|------------------------------|---------------|
| E1 | Will you be willing to enroll for the VCHIS? | Yes=1, No =2, Don't know = 3 | [] 1→E3 |
| E2 | If no or Don't know why? | | |
| E2a | Lack of trust | Yes=1, No =2 | [] |
| E2b | Religion/Cultural Belief | Yes=1, No =2 | [] |
| E2c | Political | Yes=1, No =2 | [] |
| E2d | Health status | Yes=1, No =2 | [] |
| E2e | Household Size | Yes=1, No =2 | [] |
| E2f | Financial Consideration | Yes=1, No =2 | [] |
| E2g | Others (specify) | Yes=1, No =2 | [] |
| E3 | Will you be willing to contribute to the VCHIS? | Yes=1, No =2, Don't know = 3 | [] 1→E5 |
| E4 | If no or Don't know, why? | | |

| Qno | Question | Options | Recording box |
|------|---|-------------------------------------|---------------|
| E4a | Lack of trust | Yes=1, No =2 | [] |
| E4b | Religion/Cultural Belief | Yes=1, No =2 | [] |
| E4c | Political | Yes=1, No =2 | [] |
| E4d | Health status | Yes=1, No =2 | [] |
| E4e | Household Size | Yes=1, No =2 | [] |
| E4f | Financial Consideration | Yes=1, No =2 | [] |
| E4g | Others (specify) | Yes=1, No =2 | [] |
| E5 | Will you be willing to enroll other members of your household in the voluntary contributor insurance scheme? | Yes=1, No =2, <u>Don't know = 3</u> | [] 2,3→E7 |
| E6 | If yes, how many members of your household are you willing to enroll? | Number of Household Member | [][] →E8 |
| E7 | If no or Don't know, why? | | |
| E7a | Lack of trust | Yes=1, No =2 | [] |
| E7b | Religion/Cultural Belief | Yes=1, No =2 | [] |
| E7c | Political | Yes=1, No =2 | [] |
| E7d | Health status | Yes=1, No =2 | [] |
| E7e | Household Size | Yes=1, No =2 | [] |
| E7f | Financial Consideration | Yes=1, No =2 | [] |
| E7g | Others (specify) | Yes=1, No =2 | [] |
| E8 | Will you be willing to contribute for other members of your household in the voluntary contributor health insurance scheme? | Yes=1, No =2, <u>Don't know = 3</u> | [] 2,3→E10 |
| E9 | If yes, how many members of your household are you willing to contribute for? | Number of Household Member | [][] →F1 |
| E10a | Lack of trust | Yes=1, No =2 | [] |
| E10b | Religion/Cultural Belief | Yes=1, No =2 | [] |
| E10c | Political | Yes=1, No =2 | [] |
| E10d | Health status | Yes=1, No =2 | [] |
| E10e | Household Size | Yes=1, No =2 | [] |
| E10f | Financial Consideration | Yes=1, No =2 | [] |
| E10g | Others (specify) | Yes=1, No =2 | [] |

SECTION F: WILLINGNESS TO PAY (BIDDING GAME)

| Q/No | Question | Options | Recording box |
|------|---|-------------------------------|--------------------------------|
| F1 | Consider your current household size and expenditure; would you be willing to pay an average of N1, 500 per household member per month for VCHIS? | Yes=1, No =2, Don't know=3 | [] 2→F5 3→F5 |
| F2 | If yes, consider a situation where there is marked improvement in the health care delivery to your satisfaction, would you be willing to pay an average of N1, 600 per HH member per month? | Yes=1, No =2 | [] 2→G1 |
| F3 | If yes, consider a situation where inflation set in and cost of health services increases would you be willing to pay an average of N1, 700 per HH member per month? | Yes=1, No =2 | [] 2→G1 |
| F4 | If yes, for the purpose of proper maintenance of health care infrastructures and sustainability of the improved health system , what is the maximum the respondent is willing to pay per HH member per month? | Amount | [] →G1 |
| F5 | If No, Consider a situation where the provision of health services become cheaper, would you be willing to pay an average of N1, 400 per HH member per month? | Yes=1, No =2 | [] 1→G1 |
| F6 | If No, Consider a situation where there is additional subsidy to further reduce the cost and make health care affordable, would you be willing to pay an average of N1, 300 per HH member per month? | Yes=1, No =2 | [] 1→G1 |
| F7 | If No, considering the importance of your health, what is the maximum amount you are pay per HH member per month? | Amount | [] →G1 |

SECTION G: LIVING STANDARD (HOUSEHOLD ASSETS/CONSUMPTION PATTERNS)

This section is designed to find out information to determine the socio-economic status and ability to pay for the health insurance

| Q/No | Question | Options | Recording box |
|------------|---|---|---------------|
| G1 | Does any member of the household currently own any of the following functioning assets? | | |
| G1a | Refrigerator | Yes=1, No =2 | [] |
| G1b | Air Conditioner | Yes=1, No =2 | [] |
| G1c | Fan | Yes=1, No =2 | [] |
| G1d | Radio Cassette | Yes=1, No =2 | [] |
| G1e | Gas Cooker | Yes=1, No =2 | [] |
| G1f | Generator | Yes=1, No =2 | [] |
| G1g | Video | Yes=1, No =2 | [] |
| G1h | Television | Yes=1, No =2 | [] |
| G1i | Bicycle | Yes=1, No =2 | [] |
| G1j | Motorcycle | Yes=1, No =2 | [] |
| G1k | Car or Truck | Yes=1, No =2 | [] |
| G1l | Bed/mattress | Yes=1, No =2 | [] |
| G2 | What is the main type of toilet facility does the household use? | Toilet on Water = 1, Flush to Sewer = 2, Flush to Septic = 3, Pail or Bucket = 4, Covered Pit Latrine = 5, Uncovered Pit Latrine = 6, VIP Latrine = 7, Bush/shot put =8 | [] |
| G3 | What type of house? | Single Room = 1, Apartment or Flat = 2, Duplex = 3, Whole Building = 4, Others = 5 | [] |
| G4 | What is the main source of drinking water for this household? | Pipe-Borne = 1, Untreated Pipe = 2, Borehole/Hand Pump = 3, Protected Well = 4 Unprotected Well or Rainwater = 5 River, Lake or Pond = 6, Vendor or Water Truck = 7, Others = 8 | [] |
| G5 | What is the main fuel used for cooking | Firewood = 1, Charcoal = 2, Kerosene/Oil = 3 Gas = 4, Electricity = 5, Crop Residue or Sawdust = 6, Animal Waste = 7, Other = 8 | [] |
| G6 | What is the main material of wall of your house? | Mud = 1, Stone = 2, Burnt bricks = 3, Cement of concrete = 4, Wood or bamboo =5, Iron sheets = 6, Cardboard = 7, Other = 8 | [] |
| G7 | What is the main material of the floor of your house? | Earth or mud = 1, Wood or tile = 2, Plank = 3, Concrete = 4, Dirt or straw = 5, Other = 6 | [] |
| G8 | How much did your household spend on food items in the last one month? | Amount | [] |

IFINUFINDO LATI SANWO FUN AWON OLUFIRAENI JIN FUN ETO ADOJUTOFO ILERA AMAYEDERUN NILU ERUWA NI IPINLE OYO

Oruko mi ni Ojezele Samuel, akeeko onimo ijinle keji ni eka eto ekoo liana ilera ati ona isakoso ni ogba ti ilera arailu, nile eko giga Fasiti ti Ibadan. Mo n se ise iwadii lori Ifunufindo lati sanwo fun olufiraenijin fun eto adojutofo ilera amayederun gbogbogboo nilu eruwa ni Ipinle Oyo.

Maa nifee lati biyin lawon ibeere kan, eleyii ti yoo gba yoo gba die ninu akokoyin. Gbogbo ohun ti e ba so fun wa ni yoo je monu ti ko si ni di awon eto ilera tee fe gba nile iwosan kankan wa lowo. Ewe, idahun tooto teba fun wa la o mo yi re. Anfani wa fun yin lati kopa tabi kee le se mo ati pe gege bi akopa, e tu ni anfani lati yowo nigba kuugba eleyii ti ko nu payin lara.

E se fun ireti atileyin yin

Se e nife lati kopa?

Beeni=1, Beeko=2 (*to be sepe beeko, da iforowanilenuwo duro*)

[]

IROYIN GBOGBOGBOO

| |
|---|
| A1. OrukoWodu: Aroko _____ [] [] |
| A2. Iwon araile [] [] |
| A3. Ojo iforowanilenuwo [] / [] / [] |

IPIN B: AGBELWON ABUDA AGABYEGBADUN

| L/No | Ako tabi abo ni olugbe | Ibasepo | Ojo ori | Apon tabi abileko | Ibo leeko de | Ilana aorko Aroko 1 |
|--------|--|---|-----------|---|--------------------------------------|--|
| B1 | B2 | B3 | B4 | B5 | B6 | 01. olori 02. Iyawo 03. omo mi 04. Omo orogun mi 05. omo omo mi 06. obi 07. Relatives 08. omo odo 09. a o tan Code 2 00. jele o sin mi 01alakobere 02 girama 03 i leeko giga 04 ko sile eko rara 05 mio mo o |
| | Efihan boya ako tabi abo laraile Ako=1 Abo=2 | Ibasepo wo lo ni si olori ile (wo aroko 1) | Omo odun? | Ipo wo lo wa bayi? 1=abileko 2=dagbe 3=pinya 4=pinya 5=opo | Ibo leekoo e de? (wo aroko 2) | |
| [01] | [] | [][] | [][] | [] | [][] | |
| [02] | [] | [][] | [][] | [] | [][] | |
| [03] | [] | [][] | [][] | [] | [][] | |
| [04] | [] | [][] | [][] | [] | [][] | |
| [05] | [] | [][] | [][] | [] | [][] | |
| [06] | [] | [][] | [][] | [] | [][] | |
| [07] | [] | [][] | [][] | [] | [][] | |
| [08] | [] | [][] | [][] | [] | [][] | |
| [09] | [] | [][] | [][] | [] | [][] | |
| [10] | [] | [][] | [][] | [] | [][] | |
| [11] | [] | [][] | [][] | [] | [][] | |

| Lno | Ipele ise eni | Ipo ilera | | |
|--------|--------------------------------------|--|---|---|
| B1 | B7 | B8 | B9 | |
| | Iru ise sise woo ni? (wo aroko 4) | <i>Oju wo left woe to ilera bayii?</i> opegede =1, o dara gidi=2, o dara=3, dara di e=4, ko dara=5 | <i>Se e mo bi eto adujutofo ilera se je?</i> <i>Beeni ...1</i> <i>Beeko2</i> <i>To ba je beeko lo si eni to kan</i> | Aroko 4 01. ise ogbin, ode sise ati igi gbibin 02. eja pipa 03. iwa kusa 04. ise alagbelero 05. ina monamona, afefe gasii ati omi pinpin 06. ile kiko 07. oja didi ta ati pinpin ta 08. ile itura ati ile onje 09. irina oko, akaa ti toju ati ibaranisoro. 10. ibanifowopamo 11. amojutole, iyanilohun, eto karakata 12. isakoso ilu ati idabobo 13. Eko 14. ilera ati ise amuludun 15. amuludun ati ise ara eni 16. akeeko 17. awon miran |
| [01] | [][] | [] | [] | |
| [02] | [][] | [] | [] | |
| [03] | [][] | [] | [] | |
| [04] | [][] | [] | [] | |
| [05] | [][] | [] | [] | |
| [06] | [][] | [] | [] | |
| [07] | [][] | [] | [] | |
| [08] | [][] | [] | [] | |
| [09] | [][] | [] | [] | |
| [10] | [][] | [] | [] | |
| [11] | [][] | [] | [] | |

IPIN C: WIWA ILERA ATI IYE ITOJU AISAN FUN IDILE/ARAILE

| Qno | Ibeere | Tabi/sugbon | Apoti |
|------------|---|---|--------------|
| C1 | Iru aisan wo tabi ailera wo lo sele si ara ile yin lati bi osu kan? | | |
| C1a | Iba | <i>Beeni=1, Beeko =2</i> | [] |
| C1b | Iba jedodedo | <i>Beeni =1, Beeko =2</i> | [] |
| C1c | Igbe gbuuru | <i>Beeni =1, Beeko =2</i> | [] |
| C1d | Arun miran (ni pato) | <i>Beeni =1, Beeko =2</i> | [] |
| C2 | Ibo lo kolo fun itoju? <i>onibeere: Ma ka akosile yii. Se eto si idahun akoko</i> | | |
| C2a | Oniwasan ibile | <i>Beeni =1, Beeko =2</i> | [] |
| C2b | Abele/tara eni | <i>Beeni =1, Beeko =2</i> | [] |
| C2c | Ologun tita | <i>Beeni =1, Beeko =2</i> | [] |
| C2d | Osise iwosan agbegbe | <i>Beeni =1, Beeko =2</i> | [] |
| C2e | Ile iwosan ayika | <i>Beeni =1, Beeko =2</i> | [] |
| C2f | Ile iwosan ijoba | <i>Beeni =1, Beeko =2</i> | [] |
| C2g | Ile iwosan aladani | <i>Beeni =1, Beeko =2</i> | [] |
| C2h | Awon miran (ni pato) | <i>Beeni =1, Beeko =2</i> | [] |
| C3 | Iru ohun irna wo lo gbalo sibi to ti gbatoju? | | |
| C3a | oko ara re | <i>Beeni =1, Beeko =2</i> | [] |
| C3b | oko akero igboro | <i>Beeni =1 Beeko =2</i> | [] |
| C3c | Takisi | <i>Beeni =1, Beeko =2</i> | [] |
| C3d | Okada | <i>Beeni =1, Beeko =2</i> | [] |
| C3e | Irin ese | <i>Beeni =1, Beeko =2</i> | [] |
| C3f | Ona miran (ni pato) | <i>Beeni =1, Beeko =2</i> | [] |
| C4 | Asiko wo lo debi igbatoju | <i>koto iseju meedogun = 1 Iseju meedogun si ogbon = 2, ogbon iseju si wakati kan = 3 Oju wakati kan lo = 4 Oju wakati meji lo =5</i> | [] |
| C5 | Igba wo ni won to o da lohun ? | <i>koto iseju meedogun = 1 Iseju meedogun si ogbon = 2, ogbon iseju si wakati kan = 3 Oju wakati kan lo = 4 Oju wakati meji lo =5</i> | [] |
| C6 | Elo to na lori eto lilo sibe ati ab? | <i>Ko ye e sile</i> | [] |
| C7 | Elo lona lori gbigba itoju, pelu, iforukosile, owo ogun, yiye wo ati yiya aworon ara? | <i>Ko ye e sile</i> | [] |
| C8 | Kini odiwon gbogbo iru ti won fun yin nile iwosan yii? | <i>opegede =1, odaragidi=2, odara=3, dara di e=4, ko dara=5</i> | [] |

IPIN D: SISAN OWO ATI ONA FUN SAN OWO

| Q/No | Ibeere | Tabi/sugbon | Apoti |
|-------------|--|---------------------------|--------------|
| D1 | Bawo ni o se sanwo fun itoju? <i>olukosile: opolopoo idahaun lagab laaye</i> | | |
| D1a | Owolowo | <i>Beeni =1, Beeko =2</i> | [] |
| D1b | Owo lati inu apo | <i>Beeni 1, Beeko =2</i> | [] |
| D1c | Owo yiya | <i>Beeni =1, Beeko =2</i> | [] |
| D1d | Tita oun ini ati ile | <i>Beeni =1, Beeko =2</i> | [] |
| D1e | Sisan edinwo | <i>Beeni =1, Beeko =2</i> | [] |
| D1f | San die die | <i>Beeni =1, Beeko =2</i> | [] |
| D1g | Agbegbe lo sanwo tabi olumiran | <i>Beeni =1, Beeko =2</i> | [] |
| D1h | Nfomo niyan se | <i>Beeni =1, Beeko =2</i> | [] |
| D1i | Ona miran (ni pato) | <i>Beeni =1, Beeko =2</i> | [] |

IPIN E: IFINUFINDO LATI SANWO FUN ETO

Awon ohunto le fa ifinufindo lati sanwo eto

(olubeere: Ni bayi, ma nife lati beere lowo yin bi o se ri lokan nipa ifinufindo lati sanwo fun eto naa fun ara yin ati ebi yin).

Opolopo igba ti awon eniyan ba se aisan, igbayanjub won lati wa ona lati toju ara won nipa tita ohun ini won bi eran o sin, ohun elo inile, ile tabi ile, ti oba je aisan to gbowolo. Nigba mi ewe, won a yawo lowo araadugbo, nile ijosi tabi owo ore. Nitoni pe, erongba ni pe ki ara tete ya kiakia. Ti a bawa je pe eni naa ko rowo ya, tabi kori iranwolo nibi kan, yoo dipe ko lugo si iyewu ki aare naa si maa rin in mole. Nigba miran, awon alaisan mi yoo wa iwosan lo sibi ti owo re ka ti ko si ni fun won ni Alafia to pe ye, apaapa lodo awon onisegun bile. Eleyi yoo tile wa buru jayi nigbati won ba yawo sugbon ti alaare to wa gbemi mi.

Nisinsinyi, ti abawo gbese ati ewu pelu isoro to nkoju idile ati eniken, a o ripe eto ifiraenijin ilera adjutofo yii yoo se iranlowo ati ba idile yoo owo nigba ti aare ban se enikan. Nigba ti won ba sagbekale eto yii ti e si dara po, ireti nipe e o san owo die lasan sile. Ti e ba san owo naa, eo tun san owo miran mo fun awon eto ilera yii ti e ba janfaani re nile iwosan ijoba tabi ti aladani fun odun kan. Awon eto ilera yii bi: *alaare lati ile, ogun lilo pelu idamewa owo, ayewo eje ati igbe, ito, itoju alaboyun, riri dokita, ayewo oju ati itoju oju, itoju isan ara, abere ajesara, ifeto somo bibi, itoju oyun ati omo, itoju pajawiri, eko ilera, irapada fun alrun opolo*

| Qno | Ibeere | Tabi/sugbon | Apoti |
|-----|--|---|----------|
| E1 | Se e ma foruko sile fun VCHIS? | <i>Beeni =1, Beeko =2, Mi o moo = 3</i> | [] 1→F3 |
| E2 | Ti o ba je beeko tabi mi o mo? | | |
| E2a | Aigberi eni je | <i>Beeni =1, Beeko =2</i> | [] |
| E2b | Esin tabi asa | <i>Beeni =1, Beeko =2</i> | [] |
| E2c | Oselu | <i>Beeni =1, Beeko =2</i> | [] |
| E2d | Ipo ilera | <i>Beeni =1, Beeko =2</i> | [] |
| E2e | Bi ebi se to | <i>Beeni =1, Beeko =2</i> | [] |
| E2f | Bi owo se wa lowo | <i>Beeni =1, Beeko =2</i> | [] |
| E2g | Ona miran (ni pato) | <i>Beeni =1, Beeko =2</i> | [] |
| E3 | Se ema dasi eto yii ? | <i>Beeni =1, Beeko =2, Mi o moo = 3</i> | [] 1→F5 |
| E4 | To ba je beeko tabi mi o mo, kin lode? | | |

| Qno | ibeere | Tabi/sugbon | Apoti |
|-----------------|---|---|----------------|
| E4a | Aigberije | <i>Beeni =1, Beeko =2</i> | [] |
| E4b | Esin tabi asa | <i>Beeni =1, Beeko =2</i> | [] |
| E4c | Oselu | <i>Beeko =1, Beeko =2</i> | [] |
| E4d | Ipo ilera | <i>Beeni =1, Beeko =2</i> | [] |
| E4e | Bi ebi se to | <i>Beeni =1, Beeko =2</i> | [] |
| E4f | Bi owo se wa lowo | <i>Beeni =1, Beeko =2</i> | [] |
| E4g | Ona miran (ni pato) | <i>Beeni =1, Beeko =2</i> | [] |
| E5 | Se e fe mu awon ara ile yooku wo inu eto yii? | <i>Beeni =1, Beeko =2, Mi o moo = 3</i> | [] 2,3→F7 |
| E6 | Ti o baje beeni awon ara ile melo le fee mu wo? | | [] [] →F8 |
| E7 | To ba je beeko tabi mi o mo, kin lode? | | |
| E7b | Esin tabi asa | <i>Beeni =1, Beeko =2</i> | [] |
| E7c | Oselu | <i>Beeni =1, Beeko =2</i> | [] |
| E7d | Ipo ilera | <i>Beeni =1, Beeko =2</i> | [] |
| E7e | Bi ebi se to | <i>Beeni =1, Beeko =2</i> | [] |
| E7f | Bi owo se wa lowo | <i>Beeni =1, Beeko =2</i> | [] |
| E7g | Ona miran (ni pato) | <i>Beeni =1, Beeko =2</i> | [] |
| E8 | Se e fe mu awon ara ile yooku wo inu eto yii? | <i>Beeni =1, Beeko =2, Mi o moo = 3</i> | [] 2,3→F10 |
| E9 | Ti o baje beeni awon ara ile melo le fee mu wo? | | [] [] →G1 |
| E10 | Aigberije | | |
| E10b | Esin tabi asa | <i>Beeni =1, Beeko =2</i> | [] |
| E10c | Oselu | <i>Beeni =1, Beeko =2</i> | [] |
| E10d | Ipo ilera | <i>Beeni =1, Beeko =2</i> | [] |
| E10e | Bi ebi se to | <i>Beeni =1, Beeko =2</i> | [] |
| E10f | Bi owo se wa lowo | <i>Beeni =1, Beeko =2</i> | [] |
| E10g | Ona miran (ni pato) | <i>Beeni =1, Beeko =2</i> | [] |

IPIN F: IFINUFINDO LATI SANWO (IDUNADURA)

| Q/No | Ibeere | Tabi/sugbon | Apoti |
|------|---|---|-------------------------|
| F1 | sayewo bi ebi se ri bayi ati iye ti e na, se ele san egberun kan abo naira lori eni kan fun osu kan ninu eto yii? | <i>Beeni =1, Beeko =2, Mi o moo=3</i> | [] 2→G5 3→G5 |
| F2 | To ba je bee, e je ka mo ibi ti owo ja eto yii ti teyin lorun, se e o le san egberun meji naira odin irinwo fun osu kan? | <i>Beeni =1, Beeko =2</i> | [] 2→H1 |
| F3 | Ti o ba je bee, eje ki a sagbeyewo ibi ti nkan ti gbowo lori ti owo eto lera yii wa di egberun meji odin ogorun meta naira lori enikan losu kan? | <i>Beeni =1, Beeko =2</i> | [] 2→H1 |
| F4 | Ti o ba je bee, fun anfani ati samojuto awon nkan eto ilera yii fun igbadun olojo pipe fun eto yii, elo nu oludahun yii fe san fun ara ile kookan | eelo | [] →H1 |
| F5 | Ti o ba je beeko, e sagbeyawo bi eto yii ba dinwo di e, se e le san egberun ati irinwo naira fun ara ile kan losu kan? | <i>Beeni =1, Beeko =2</i> | 1→H1 |
| F6 | Ti o ba je beeko, sagbayewo idinku owo sisan fun eto yii, se e o l san egberun kan ati ogorun meta naira fun ebi kan losu kan | <i>Beeni =1, Beeko =2</i> | 1→H1 |
| F7 | To ba je beeko, sagbeyewo Pataki ilera re, elo lo le san lori ara ile losun kookan? | Eelo | [] →H1 |

IPIN G: IKAPA LATI SANWO (OHUN ELO ILE/ BATANI LILO)*Ibi ni a fi mo nipa igbayegbadun re ati boya enikapa lati san owo fun adojutofo ilera re*

| Q/No | Ibere | Tabi/Sugbon | Apoti |
|-------------|---|--|--------------|
| G1 | Nje enikan ninu ara ile re ni awon elo yii? | | |
| G1a | Ero amomitutu | <i>Beeni =1, Beeko =2</i> | [] |
| G1b | Ero amuletutu | <i>Beeni =1, Beeko =2</i> | [] |
| G1c | Ero alafefe | <i>Beeni =1, Beeko =2</i> | [] |
| G1d | Redio ajegbadun | <i>Beeni =1, Beeko =2</i> | [] |
| G1e | Afefe idana gasii | <i>Beeni =1, Beeko =2</i> | [] |
| G1f | Ero amunawa | <i>Beeni =1, Beeko =2</i> | [] |
| G1g | Ero agbaworanjade | <i>Beeni =1, Beeko =2</i> | [] |
| G1h | Ero mohunmaworan | <i>Beeni =1, Beeko =2</i> | [] |
| G1i | keeke | <i>Beeni =1, Beeko =2</i> | [] |
| G1j | Tataganran | <i>Beeni =1, Beeko =2</i> | [] |
| G1k | Oko/ tabi akoyoyo | <i>Beeni =1, Beeko =2</i> | [] |
| G1l | Beedi/timutimu | <i>Beeni =1 Beeko =2</i> | [] |
| G2 | Iru ile igbonse wo ni ara ile n lo? | <i>Toju agabra = 1, alafomisan = 2, oniho = 3, onigarawa = 4, salanga onideri = 5, salanga gbayawu = 6, salanga gbalode = 7, omiran = 8</i> | [] |
| G3 | Iru ile wo? | <i>Oni yara kan = 1, ile konkojabele = 2, Ile le = 3, gbogbo ile = 4, omiran = 5</i> | [] |
| G4 | Iru omi wo ni awon ara ile mu? | <i>Omi ero = 1, omi opa to fo = 2, kanga igblode = 3, kanga taabo = 4 Kanga ta o toju tabi omi ojo = 5 Odo tabi adagun = 6, omi tita = 7, omiran = 8</i> | [] |
| G5 | Iru epo la fin dana | <i>igi = 1, eedu = 2, epo barafin/pupa = 3 Afefe gasii = 4, ina ijoba = 5, epo igi = 6, Igbe eran = 7, Omiran = 8</i> | [] |
| G6 | kin le fi se iganna ile yin? | <i>amo = 1, okuta = 2, biriki jijona = 3, samanti = 4, igi tabi oparun =5, paanu = 6, paali = 7, omiran = 8</i> | [] |
| G7 | kin le fi se ile ile yin? | <i>amo = 1, igi tabi or talli = 2, pako = 3, samanti = 4, idoti = 5, omiran = 6</i> | [] |
| G8 | elo le na lori onje laarin osu kan? | Eelo | [] |