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Rural Households Willingness to pay insurance for Health: South Gondar Zone, Amhara Region

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Abstract

The mechanism of health care funding accessible to the poor particularly the rural households has been a supply of worry in Abyssinia. In an exceedingly bid to seek out resolution to the current downside, an alternate funding theme that may cater for health care expenditure of vulnerable rural farming households has been planned. This study thus examined the willingness-to-pay for Community primarily based insurance theme by rural households in South Gondar Zone, Amhara region. 825 rural households were proportionately chosen and interviewed from regime space of the Zone. The study used the Contingent valuation and standard least square methods to research the typical quantity households are willing to pay and also the factors influencing their temperament to pay severally. The results of the study disclosed that the rural households were willing to pay a median of Birr 2,160.53 per head per annum (.57 USD per person per month). The age of the unit head and unit monthly financial gain were found to considerably influence the most quantity the rural households are willing to pay. The study suggested that the government ought to enabling atmosphere that will encourage the institution and operation of private insurance besides to the existing insurance schemes in rural areas.

Key words: Willingness, Pay, Insurance, Health& Rural Households

Introduction

Every year, roughly a hundred and fifty million people globally experience monetary catastrophe, this implies that they pay quite forty % of the financial gain accessible to them on health care once meeting their basic wants [1]. Rural households typically forgo high-value care; nevertheless still typically pay substantial sums for care of quality [2]. These high health care expenditures mean a short-run health shock and may cause debt, quality

sales, and removal of youngsters from college thereby making long-term will increase in poorness [3,4].The harmful nature of this health care mechanism funding for the poor and infrequently rural population has been a supply of worry for the country and alternative low and middle financial gain countries of Africa.

Advocates thus are in favor of developing various funding theme to cater for the sudden nature of health care expenditure that ought to cowl vulnerable rural dwellers. The Community based health insurance (CBHI) was advocated as a transmutation mechanism to achieving universal coverage for health in low financial gain countries particularly the agricultural dwellers thanks to their inability to access quality health care services provided by their various governments [5].

Community based health insurance (CBHI) may be a not-for-profit kind of insurance that has been employed by poor folks to guard themselves against the high prices of seeking treatment and treatment. In CBHI schemes, members frequently pay tiny premiums into a collective fund that is then accustomed purchase health services that they need. Several CBHI schemes are designed for people who live and add rural areas or the informal sectors that are unable to induce adequate public, private, or employer-sponsored insurance. Beneficiaries of the theme are related to or concerned in its management, a minimum of within the alternative of the health services it covers. It's voluntary in nature, shaped on the idea of mutual relationship and covers a range of profit packages. The other service not coated by the theme is sometimes borne by the unit however the most plan is to hide the fundamental health care wants of the poor like malaria and typhoid, tuberculosis and diarrhea. CBHIs is initiated by health service suppliers, non-governmental organizations, trade unions, native communities, and may be in hand and go past any of those organizations.

Several factors have recently stirred up the event of personal insurance mechanisms as a way to finance health care in low-and middle-income countries. These factors embody difficulties with ancient ways that of health care funding, wide-ranging shopper demands within the course of economic development and intense change the health-services sector that has introduced foreign insurance suppliers to developing countries. Despite various efforts to ascertain functioning health care systems, the majority in developing countries still deem direct payments to finance their health care wants. In some regions, these owed payments will account for up to 8% of total health expenditure.

Personal postpaid programs, like Community based insurance schemes are typically the sole potential method for poor folks to participate in risk- pooling programs. proof to date suggests that personal schemes of Community Health set up will improve access to health care and supply monetary protection even to marginalized teams (this includes tiny scale farming households) [6]. Despite the growing importance of personal health insurance (PHI), however, amazingly very little is thought regarding its role in national health systems within the developing world [7].

According to the [8], majority of the population in low-income countries remains uncovered against the danger of health problem. In rural and remote areas, unit dealing

value of contracts is simply too high, leading typically to a state of market failure [6]. Therefore, in an exceedingly bid to boost the health standing of Ethiopians, the government under the next Growth and Transformational plan (GTP), has set to boost physical and monetary access to smart quality health services and additionally increase customers awareness of their health rights and obligations. one amongst the ways that with, that they hope to realize this, was to develop and implement a comprehensive health care funding strategy, as well as the quick pursuit of the National insurance theme (NHIS) and to develop and implement a method to boost community participation in providing and funding health services [9]. The success of the theme but, among alternative factors, can rely upon rural unit temperament to participate within the program [10]. It's necessary to notice that the extent of awareness of individual households regarding the theme, can verify their acceptance of it. Also, the high level of poorness in Ethiopia's rural areas is another issue to be thought of.

[11] Additionally advised that persons with insurance could expertise difficulties with monetary access if their coverage doesn't be specific services or if deductibles are set at levels on the far side their suggests that to pay. Thus, sizable amount of Ethiopian voters might not be able to afford payment for postpaid insurance theme as planned by the government, even with its several advantages for each suppliers and consumers. Therefore, the shift towards insurance is welcome in essence, however suggests that to achieving best public-privatesector combine and participation of the meant beneficiaries stay a significant challenge [12]. various sorts of health care funding and cost-recovering ways are heavily criticized, the choice of insurance looks to be a promising various because it may be a risk to pool risk transferring, unpredictable health care prices, to mounted premiums [13]. This study thus examined the willingness-to-pay for Community primarily based insurance by rural households in South Gondar Zone, Ethiopia.

Methodology

The study used mix of descriptive statistics and also the contingency valuation methodology. The willing to pay (WTP) for community primarily based insurance theme within the study space was analyzed mistreatment the contingent valuation methodology (CVM), projected by [14]. The tactic has been utilized in several areas together with surroundings, health, transport and promoting and has verified to be a helpful instrument to get data on people's preferences for non-marketed merchandise. The CV methodology that belongs to the family of the supposed expressed preference techniques could be a "survey-based methodology oft used for putting financial values on environmental merchandise and services not bought and sold-out within the marketplace" [15]. The contingent valuation survey includes; a close description of Zone community insurance, questions about disposition to pay money for insurance theme, questions about respondents' characteristics (age, income, education, etc.) and also the willingness-to-pay question that was outlined during a manner within which payment can be created

(monthly, quarterly, annually, etc.). Thereafter, the common (mean) disposition to pay (WTP) per social unit head per month was calculable. The political economy model that was accustomed analyze the factors that verify the disposition to pay (WTP) by the respondents is implicitly expressed as follows: Y=f(X1,X2,X3,X4,X5X6,X7,X8,……U) Where,

Y=disposition to pay (Birr/Head/Year),
X1=Gender of social unit Head (F= zero, M = 1)
X2= academic levels of social unit Head (Years of schooling)
X3=Age of social unit Head (Years)
X4=Primary occupation of social unit Head (Farming = one, zero otherwise)
X5 =Occupational expertise (Years)
X6=Household size
X7 = Total monthly expenditure of social unit (birr)
U=Random error term

Data and sample characteristics

The data utilized in this study were derived from a survey of farming social unit in Sede-Muja, Lay-gayent and Tach-gayent districts of South Gondar Zone, Amhara region. These areas were chosen for this study due to its high financial condition incidence, its wide socioeconomic heterogeneousness and its location: it's among the poorest space within the Zone in terms of prevalence of hungriness and financial gain financial condition. The Zone includes a total population of regarding a pair of.1 million individuals, seventy per cent of which may be classified as farmer farmers [16].

The sample consists of 825 rural households that were designated at random mistreatment proportion technique. Personal interviews were administered with the social unit head, within the presence of different relations. An identical form was used that coated data on the financial gain, socioeconomic characteristics, and different discourse variables. Since the first interest is to look at the disposition of the farming households to pay money for community insurance further as its determinants, data on the categories of insurance packages offered to households, most quantity social unit head was willing to pay money for insurance, total monthly expenditure of the social unit among others were additionally collected.

Results and discussion

Socio-economic characteristics of respondent

Table 1. Summary statistics of variables used in the analysis.

Variables	Mean	Standard Deviation
Age (years)	45.09	12.05
Education (Years of Schooling)	6.20	4.04
Household Size (Adult Equivalent)	6.67	4.02
Total Asset (Br. '000)	215.4	123.12
Dependency ratio	1.15	0.82
Income (Br. '000)	0.261	0.69
Health Expense ((Br. '000))	0.18	0.17
WTP(Birr/head/year)	2160.53	3815.92

Source: Own survey, 2021

The variables as shown in Table 1 indicated that on the common, the age of the social unit head is 45 years, a sign that majority of the agricultural households are still in their prime age. Also, on the common, the social unit head has regarding half dozen years of schooling and with a social unit size of regarding seven persons. The mean social unit financial gain and health expense are close to Br.261 and Br.180 per month severally. These shows a mean rural social unit in these areas can possibly need different mechanism of attention funding to be able to attend to their health problems.

Awareness regarding community insurance

Table 2. Awareness about community health insurance

Awareness	Frequency	Percentage
Unaware	23	2.8
Aware	802	97.2
Total	825	100.0

Source: Own Survey, 2021

Table 2 shows that solely 2.8 % of the respondents don't seem to be responsive to the community insurance whereas the remaining 97.2% are responsive to the insurance program. This suggests that majority of the respondents within the study space are responsive to the program.

Table 3. Maximum amount respondents are willing-to-pay.

WTP Amount (Birr/Head/Year)	**Frequency**	**Percentage**
<300	192	23.3
300 -800	422	51.2
801 – 1300	28	3.4
>1300	183	22.2
Total	825	100.0
Mean	2160.53	
Standard Deviation	3815.92	

Source: Own Survey, 2021

Table 3 shows that solely 22% of the respondents are willing to pay over Birr 1,300 per head every year for insurance within the study area. Themean amount households were willing to pay is Birr 2,160.53 per head every year (.57 USD per person per month). This suggests that on the common households are willing to pay money for health services since they're quite acquainted with the program as seen in Table 1. It should even be attributed to the very fact that they're acquainted with the satisfaction that may be derived from the Community Health program.

Factors of willingness to pay money for insurance

Table 4. Determinants of the maximum amount respondents are willing-to-Pay.

Variables	**Coefficient**	**Standard Error**	**t-value**
Age	51.5136**	25.279	1.70
Gender	3356.98	2153.60	1.18
Years of Schooling	24.6479	53.412	0.52
Household size	-137.9502	273.927	-0.87
Health expense	0.0115	0.1700	0.06
Monthly income	0.7079**	0.0547	2.14
Constant	-2.233.202	2680.07	-0.84

Source: Own Survey, 2021; *Significant at 10 %, ** Significant at 5%

It is deduced from table 4 that the age of social unit head was absolutely vital to the utmost quantity he/she was willing to pay money for the insurance theme at 5% per cent level of significance. This suggests that older social unit heads are a lot of willing to pay higher quantity than the younger ones. so as words, a unit increase within the age of social unit head can end in a Birr 51.5 increase within the quantity he/she are going to be willing to pay all things being equal.The monthly financial gain of social unit head was additionally

vital at 5% level of significance. This can be attributed to the very fact that higher financial gain will translate to enhanced ability to pay all things being equal.
The gender of social unit head, years of schooling of social unit head and health expense were absolutely connected however not vital whereas the social unit size was negatively connected. The signs of those variables trust a-priori expectation despite the very fact that they're not vital. This might be as a result of female headed social unit utilized in the study was comparatively only a few whereas the social unit size and monthly health expense solely varied slightly.
These variables may become vital by in all probability increasing the sample size.

Conclusion

From the results of the study, it can be conclude that rural households are willing to pay money for insurance theme. Also, the numerous determinants of the number these social units are willing to pay embrace the age of the social unit head and monthly financial gain of the household age.

Recommendations

The study suggested that government and society ought to work along to style and manage the implementation of insurance schemes targeted at the rural households. Also, the government has better to create good environmentfor the institution and operation of different (private) insurance schemes that may facilitate within the universal health coverage of the vulnerable teams within the nation. Of these can facilitate to extend the standard of labor offered for production functions and successively enhance continuous development.

Ethical Approval and Consent to Participate

The Ethical clearance letter was obtained from Debre Tabor University Ethical Review Committee. Then, a written official letter was obtained from sampled South Gondar Zone Hospitals. The objective of the study was explained to each study participant during the data collection period. We followed standard operating procedures (SOP) during data collection. Here, informed and written consent was obtained from each participant before the data collection. Participation in the study was entirely voluntary. For all participants, we assured that refusal was possible during any stage of the interview. The confidentiality was guaranteed by removing personal identifiers through using codes. After analyzing the data, we assured that the result of the study will be published in an international scientific journal.

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Authors' Contributions
The first initiations of this research title were credited to the first author, **AlebelWoretaw**. To the rest of the tasks, like study design,data collection, oversight, data interpretation, and manuscript writing both authors contributed equally. Both authors have read and approved the manuscript.

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