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COLLEGE OF HEALTH SCIENCES

DEPARTMENT OF HEALTH ECONOMICS SCHOOL OF PUBLIC HEALTH

**ASSESSMENT OF FACTORS INFLUENCING ENROLLMENT OF COMMUNITY-
BASED HEALTH INSURANCE SCHEME IN AMARO DISTRICT OF SNNPR,
ETHIOPIA, IN 2020.**

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**A RESEARCH THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY COLLAGE OF
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A Thesis Submitted to the School of Public Health

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Health in Health Economics

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Table of Contents

Content	page
Approval sheet	ii
Statement of author	iii
Acknowledgment	iii
Table of content	vi
List of tables	vii
List of figures	vii
List of appendices.....	viii
Abrivations and Accronyms	ix
SAMMARY.....	x
CHAPTER ONE	1
1.INTRODUCTION	1
1.1 BACKGROUND	1
1.2 Statement of problem.....	2
1.3 Significance of the study.....	2
1.4 Research questions.....	3
1.5 Objective of the study	3
1.5.1General objective	3
1.5.2 Specific objectives	3
CHAPTER TWO.....	4
2. LITERATURE REVIEW	4
2.1. Definition and Concept of Health Insurance	4
2.1.1. Concept of Health insurance	4
2.2. Overview of Health Sector in Ethiopia	4
2.3. Development of Health Insurance in Ethiopia.....	5
2.4. The Health Care System	6
2.5. Health Care Financing in Ethiopia.....	6
2.5.1. Magnitude and sources of financing.....	6
2.5.2. The New Health Care Financing Strategy	7
2.6. Magnitude of Community-based health insurance utilization	7
2.7. Factors associated with utilization of CBHI	8
2.7.1. Socio-demographic factors	8
2.7.2. Health and health related factors.....	10
2.7.3. Socio-economic and client factors	10
CHAPTER THREE	13
3. Methods.....	13
3.1. Study design.....	13
3.2 Study area.....	13
3.3 Study period.	13
3.4 Study population	13
3.5. Inclusion and exclusion criteria	13
3.5.1. Inclusion criteria	13
3.5.2. Exclusion criteria	14
3.6 Sample size determination.	14
3.7 Sampling procedures.....	14
3.8 Data collection instruments.....	14
3.9 Data collection methods.....	14

3.10. Study variables.....	14
3.10.1. Dependent variable	15
3.10.2. Independent variables	15
3.11. Operational definitions.....	15
3.12. Data Analysis procedures	15
3.13. Data quality management	16
3.14. Ethical consideration.....	16
3.15. Dissemination of results.....	16
CHAPTER FOUR.....	17
4. RESULTS	17
4.1. Socio-demographic characteristics of study participants	17
4.2. Community-based health insurance utilization.....	18
4.2.1. Reasons for community-based health insurance utilization.....	18
4.2. 2. Health and health related characteristics	21
4.3.1. Results of bivariate logistic regression analysis	22
4.3.2. Results of multivariate logistic regression analysis	24
CHAPTER FIVE.....	26
5. DISCUSSION, CONCLUSION AND RECOMMENDATION	26
5.1 DISCUSSION.....	26
5.1.1 Strength and limitation of the study	29
5.2. Conclusion	30
5.3. Recommendations	30
REFERENCES	31
APPENDICIES	34
Appendix A: Participant information sheet and informed consent form (English version)	34
Appendix B: English version Questionnaire	35
Amharic version Questionnaire	42
Appendix C : Curriculum vitae (CV)	51

LISTS OF TABLES

Table	Page
1: Sample size calculation for Magnitude of CBHI utilization and its associated factors among informal workers in Amaro district, 2019/20.	13
2: Socio-demographic characteristic of the study participants on community based health insurance enrollment, 2020. (n =389)	16
3: Knowledge questions and responses on community-based health insurance enrollment and associated factors among informal workers in Amaro District, 2020. (n=389)	17
4: Reasons for community-based health insurance enrollment among informal workers in Amaro District, 2020. (n=79)	18
5: Factors associated with community based health insurance enrollment among informal workers in Amaro district, Bivariate logistic regression analysis, 2020. (n=389)	22
6: Factors associated with community based health insurance enrollment among informal workers in Amaro district, Multivariate analysis, 2020. (n=389)	24

LISTS OF FIGURES

Figure	Page
1: Conceptual framework on community-based health insurance enrolment and associated factors among informal workers.	12
2: Pie chart depicting reasons for not member in community -based health insurance in Amaro district, 2020. (n=389)	19
3: Bar chart showing the house holds wealth index and households enrollment status of community based health insurance in Amaro district, 2020. (n=389)	21

ABBREVIATIONS AND ACRONYMS

AOR	Adjusted Odd Ratio
CBHI	Community-Based Health Insurance
CI	Confidence interval
COR	Crude Odd Ratio
EFMOH	Federal Ministry Of Health
EDHS	Ethiopian Demographic and Health Survey
EIC	Ethiopian Insurance Corporation
ETB	Ethiopian birr
HCFS	Health Care Financing Strategy
IHRERC	Institutional Health Research Ethical Review Committee
HA	Health Account
HAD	Health Development Army
MMR	Maternal Mortality Ratio
NGOs	Non-governmental Organizations
NHA	National Health Account
OECD	Organization for Economic Co-operation and Development
OOPE	Out Of Pocket Expenditure
PHCU	Primary Health Care Unit
SNNP	Southern Nation Nationalities and Peoples
SPSS	Statistical Package for Social Science
USAID	United States Agency for International Development
WHO	World Health Organization
WTJ	Willingness to Join

SUMMARY

Background: In Ethiopia out of pocket health expenditure is high risking to impoverishment, inequitable access and utilisation of health care. To curb this government has developed a health insurance policy to improve financial access, quality and health care coverage. To solve these problems, to successfully implement the community-based health insurance in the district and nearest districts there exists a thin layer of evidence. Nevertheless, evidence on factors that influence households to actively utilizing health insurance of the program is unknown that makes sustainability and effectiveness of the program in question.

Objective: To assess factors influencing enrollment of community-based health insurance scheme in Amaro District of SNNPR, Ethiopia in 2020.

Methods: A community-based cross sectional study design was used among randomly selected 389 households. Binary logistic regression analysis was applied to compute crude odds ratio with its 95% confidence interval to test the associations between dependent and independent variables. Then variables found to have $P < 0.25$ in the bi-variate analysis was taken as candidate for multivariable analysis. A P -value of 0.05 with a confidence interval of 95% was used to declare level of statistical significance.

Results: The prevalence of community-based health insurance enrolment was 20.3% [(95% CI: [23.8, 31.2)]. Covariates like: Relatively older ages [(AOR:3.7; 95% CI:[0.07,10)], formal education [(AOR:1.3; 95% CI:[3.6,34)], non farmers [(AOR : 3 ; 95% CI: [0.9, 80)]. and agree on affordability of premium [(AOR: 0.6 95% CI:[0.02, 1.842)], good knowledge on CBHI [(AOR: 2.7 ; 95% CI : [0,0.192)], had statistically significant association with community-based health insurance enrolment. **Conclusion:** The prevalence of community-based health insurance enrolment in this study area was low. This study pinpointed the need to disseminate information and discuss with community on the issues related to principles of community-based health insurance, the benefit packages, the premium and efforts should be devoted to meet expectation of the community regarding the quality of healthcare by the District health office, insurance officials and health professionals to enhance the enrolment.

Key words: Community-based health insurance, enrolment, utilization, scheme, southern Ethiopia.

CHAPTER ONE

1 .INTRODUCTION

1.1.BACKGROUND

A fundamental feature of achieving universal coverage is to develop a financial risk pooling system that provides cross-subsidies in health systems where ability to pay determines financing contributions and the use of services is on the basis of need for care. Lack of financial protection which lead to exclusion from health care and impoverishment, trapping families in a cycle of poverty and ill health is the main challenge of low and middle-income countries. This led to the emergence of CBHIs in different regions of developing countries and hence CBHI schemes are becoming increasingly recognized as an instrument to finance health care in developing countries(1).

The need for health insurance in Ethiopia are to remove financial barriers, to reduce catastrophic out of pocket expenditure (OOP), to increase health service utilization, to improve quality of care by increasing resources for health facilities through strong community involvement and ownership, to enhance equity, and to ensure sustainability. The goals of the current HCF strategy of the Federal Democratic Republic of Ethiopia is to identify and obtain resources from both domestic and external sources, to increase efficiency in the use of available resources especially through allocating more resources to primary care, to promote sustainability, and to improve the quality and coverage of health services(EFMOH,2017) (2).

Community-based Health Insurance (CBHI) is a not-for-profit type of health insurance in which members regularly pay small premiums in to a collective fund.Which is then used to protect themselves against the high costs of seeking medical care and treatment for illness and it covers the poor , unemployed and those living in the rural areas. It has an advantage of minimizing the equity gap and reducing out-of-pocket spending, increase awareness regarding the value of insurance, building self-belief among participants through community control mechanisms, and enhancing utilization of the health care system.CBHI has been implemented in 13 pilot woredas. Substantial development of administrative processes was completed as part of these pilots. Enrolments in pilot woredas averaged 48% ranging from 25 to 100% of the households (3). Over the years, the number of woredas that have launched CBHI and member size is increasing. In 2008 EFY, 320 woredas launched CBHI. This increased to 375 woreda in 2010 EFY. Scale-up of CBHI is now underway in 5 Regions(

Tigry, Amhara, Oromia, SNNPR, and Benshalgulgumuz) and Addis Ababa city administration with 427 woredas (National Insurance agency). This study aims at studying factors influencing enrollment and implementation challenges of community-based health insurance schemes in Amaro District of SNNPR, Ethiopia. Therefore, generating data on factors influencing enrollment of CBHI will give a factual insight to successfully implement the program in district.

1.2. Statement of problem

Large number of people cannot use health facility service because of financial problem and fear of direct out-of-pocket payment at the time of service delivery (2). Every year 150 million people suffer from financial health-care expenses due to their low income in lower- and middle-income countries. The predominant forms of health financing are Fee-for-service and out-of-pocket payments and health insurance is set up to provide financial risk protection and mobilize resources to avert impoverishment that may arise from paying OOP for healthcare. In Ethiopia the estimated household contribution to health spending was about 21.7 billion Ethiopian birr (ETB) of which 18.21 billion ETB was in the form of out-of-pocket (OOP) payments, 2.87 billion ETB was in the form of community contribution to health system strengthening (HDA and malaria control activities), and another 620 million ETB was for premium contributions to insurance. Though; out-of-pocket spending over the last 15 years has decreased as a share of the total health expenditure, from 53% in 1995/96 to 31% in 2016/17 (NHA I and VII) it still remains a burden to households. To minimize these problems Ethiopia has designed and implemented community-based health insurance pilot programs since 2011. The Ethiopian health sector transformation plan sets a target of increasing the proportion of people enrolled in health insurance to 80% (3). But the enrollment in Amaro district is very low only poor people (indigents) who are identified as below the poverty line are beneficial from CBHI which is 1% of the total population. The objective of this study is therefore, to assess factors influencing enrollment in Amaro District, SNNPR Ethiopia to provide inputs to increase enrollment in target woreda.

1.3. Significance of the study

This study is aimed at studying factors influencing enrollment in community based health insurance in Amaro district. Therefore, generating a data on community based health insurance influencing factors will give a factual insight to the successfully implement the program in district. The study contributes to the scientific development of public health profession on the knowledge of community based health insurance and produces input

information that might help policy makers on CBHI and furthermore, it helps as baseline for other researchers who want to study more on the topic area.

1.4. Research question

This study is intended to answer the following research question:

1. What are factors influencing enrollment in community-based health insurance?

1.5. Objective of the study

1.5.1. General objective

- To assess factors influencing enrollment of community-based health insurance scheme in Amaro District of SNNPR, Ethiopia in 2020.

1.5.2. Specific objectives

1. To assess factors associated with enrolment of community-based health insurance scheme in Amaro District .
2. To provide recommendation on factors influencing enrollment of community-based health insurance scheme in Amaro District .

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Definition and Concept of Health Insurance

2.1.1. Concept of Health insurance

Health insurance can be defined as a way to distribute the financial risk associated with the variation of individuals' health care expenditures by pooling costs over time through pre-payment and over people by risk pooling (4).

Community-based health insurance is a non-profit scheme organized in order to improve financial access to health care services and to protect its members against the financial risks associated with illness. It operates based on solidarity and mutual aid values with its institutional arrangements designed to maximize its key functions of revenue collection, risk pooling and purchasing of health care services. (5)

If universal healthcare coverage is to be financed through insurance, the risk pool needs the following characteristics: i) compulsory contributions to the risk pool (otherwise the rich and healthy will opt out); ii) the risk pool has to have large numbers of people, as pools with a small number cannot spread risk sufficiently and are too small to handle large health costs; and iii) where there is large number of poor, pooled funds will generally be subsidized from government revenue (6).

2.2. Overview of Health Sector in Ethiopia

Ethiopian Demographic and Health Surveys (EDHS 2000, 2005, 2011 and 2016) show improving trends for major health outcome and coverage indicators. Over the past 15 years, under-five mortality (U5MR) has declined from 166 deaths per 1,000 live births in 2000 to 88 deaths per 1,000 live births in 2011, and to 67 deaths per 1,000 live births in 2016. Infant Mortality Rates (IMR) has declined from 97 deaths per 1,000 live births in 2000 to 59 death per 1,000 live births in 2011, and to 48 deaths per 1,000 live births in 2016. Despite improvements in childhood morbidity and mortality, nearly one in three children is chronically under-nourished 38% of children are stunted (7).

According to the EDHS estimates, there is a steady decline in maternal mortality ratio (MMR) in the past 15 years: from 871 deaths per 100,000 live births in the 2000 to 412 deaths per 100,000 live births in 2016.

Since 2004, Ethiopia's health sector has been driven by public sector-wide reform which focused on restructuring the system to establish customer-focused institutions, rapidly scaling-up of health services and enhancing the quality of care. The sector has tested a variety of approaches, including benchmarking best practices, designing new processes and revising organizational structures. The resulting health service delivery in Ethiopia is a three-tier system, which includes (i) A Primary Health Care Unit (PHCU) comprising primary hospital, health center and satellite health posts which is planned to serve 60,000-100,000 people, 15,00 - 25,000 people, and 3000-5000 people respectively, (ii) secondary level health care- comprising general hospital which is planned to serve 1-1.5 million people, and (iii) tertiary level health care- comprising specialized hospital which is planned to serve 3.5-5 million people. (2)

The public sector still remains the major provider of health services, accounting for about 44% of the total health services, followed by the private which provided 35% of the services, NGO 19% and donors accounts for remaining 2% (8).

According to the National Health Accounts for 2016/2017, the total health expenditure per capital spending on health increased by 5.3% per year on average, from \$28.5 in 2013/14 to \$33.2 in 2016/17. In terms of sources of financing the health sector, the government manages the largest proportion of health spending, although its share has increased slightly, from ETB 14.7 billion to 23.7 billion between 2013/14 to 2016/17; the second largest manager is households, at 31 percent. NGOs manage 15% of the resource (8).

2.3. Development of Health Insurance in Ethiopia

The coverage with formal and informal insurance is minimal. Specifically informal health insurance or Community-based Health insurance has not been implemented till recent. While the formal sector that is state owned enterprises cover up to 50% of medical expenses of their employees. Ethiopian insurance corporation (EIC) was the only commercial establishment providing health insurance as optional extension to life insurance policy. The benefit package for the health component usually doesn't exceed US\$ 1,000 per year. For instance in 1995 the number of policies sold were 900 covering 10,869 people (representing only

0.03% of the total population). The total premium for these policies was 767, 606 birr (about 108,113 US\$) and the amount claimed that year was 570,482 birr (about 80,350 US\$) (9).

2.4. The Health Care System

The Ethiopian health system has undergone huge transformations since the mid-1990s across all health system building blocks: the health system now has an enhanced primary health care (PHC) system with health posts (HP) and health extension workers (HEWs) providing preventive and promotive services at the rural and urban kebele level as well as health centers (HC) providing basic curative care and prevention services, access to care has dramatically increased through accelerated expansion of health facilities with special attention to primary care, infant and child mortality has reduced significantly, and the country has achieved the 4th Millennium Development Goal (MDG) in reducing under-5 child mortality by two-thirds from the 1990 estimates as a result of focused intervention on priority services, an astronomic expansion of training institutions (from 3 universities in 2005 to more than 23 colleges in 2012) to meet the growing demand for health professionals has occurred, and per capita spending on health grew five-fold from US\$4.07 in 1995/96 to US\$21 in 2010/11 largely due to the aggressive efforts to mobilize international funding supported by, implementation of health care financing reform (HCFR) in the country. The reforms in HCF aim to increase health resources, protect the poor, and introduce equitable financing mechanisms. These reforms are now being implemented in the majority of the regions that have more than 80% of health facility coverage. All the achievements mentioned above are due to the government's committed and dedicated leadership to transform the health system (2).

2.5. Health Care Financing in Ethiopia

2.5.1. Magnitude and sources of financing

The Ethiopian government has been making budgetary allocation since 1949. For the fiscal year 1998/99 the share of health expenditure to the total public expenditure amounted to about 6.5%. With this, the overall public per capital health expenditure was only 13.6 birr (about 1.8 US dollar per year). International assistance (bilateral and multilateral) also plays a crucial role in the financing of health service projects (10).

According to the Health Care Financing Strategy of Ethiopia since the introduction of formal health services in the country; responsibility for providing health services has rested almost

entirely on the government sector. Prior to the introduction of the first health policy in 1993, health priorities and general resource allocation biases kept the government health expenditure at lower levels and most of the recurrent budget was spent on salaries. The share of government capital budget for health was also very low and the construction of new health facilities and maintenance of existing ones was very limited. In addition, allocation of resources to the health sector was highly skewed in favor of urban centers, and secondary and tertiary health care services. As a result, the health system deteriorated steadily and was able to reach only a limited section of the population. The 1993 policy, along with the 1998 HCFs, was developed to address this worrying trend and for providing modern promotive, preventive, curative and rehabilitative services to all segments of the population, in all parts of Ethiopia, by increasing resources to the health sector (2).

2.5.2. The New Health Care Financing Strategy

The government of Ethiopia has adopted health care financing strategy to overcome problems of health financing. Thus the 1998 Health Care and Financing Strategy emphasized goals of increasing the financial resources for health through a pluralistic approach involving government, external, and private domestic contributions; increasing efficient use of resources linked to decentralized planning; strengthening sustainability of health financing; and improving service coverage and quality. It launched specific initiatives to strengthen the collection and use of user fees through fee retention at health facilities, programs of fee exemption for key services and those in need linked to public financing to compensate for delivery of free services; enhanced private sector contributions to health; and piloting of new community-based health insurance initiatives. (2).

2.6. Magnitude of Community based health insurance utilization

The study conducted on enrolment in Ethiopia's community based health insurance scheme by using longitudinal survey of households supported by qualitative method in CBHI pilot regions, 2011/12, in Ethiopia overall the uptake of CBHI was 45.5% during December 2012. In piloted four regions the uptake was 44%, 35%, 49%, 34% in Oromia, SNNPR, Amhara and Tigray respectively since April 2020(11).

The Case study conducted in the same regions by USAID 2011-14 reviewing the secondary documents in the piloted districts revealed that the average CBHI enrolment rate was 52.4% of eligible households, six woredas had enrolment rate higher than 60%, with 100% coverage

in Yirgalem woreda (SNNPR) and 91% in Tehuledere (Amhara). Deder (Oromia) had the lowest CBHI enrolment 35% (12).

As Ethiopian Health Insurance Agency Evaluation of Community-Based Health Insurance Pilot Schemes in Ethiopia, 2015 the enrolment rate in the pilot area were found to be 67% in Dimbitchu and Damboya, 62% in South Achefer, and 38% in Fogera (13). But According to the study conducted in Tehuledere district South Wollo zone by Samuel et al, during 2015 the CBHI enrolment rate was 94% (14).

2.7. Factors associated with enrollment of CBHI

2.7.1. Socio-demographic factors

The study conducted on households of Bench Maji zone, SNNPR using cross sectional design, older ages were 94 % less likely to enroll in CBHI and to join the scheme (17). However in the study done on determinants for participation in public health insurance among urban slum residents of Kenya in 2012, on determinants of health insurance ownership among women in Kenya, using cross sectional study on households, age was not significantly associated with participation in the scheme (15).

The results of Melaku .H had revealed that being female is 70% more likely chance of being participant in Kenyans public health insurance program (17). But in the study done on determinants of health insurance in the rural population of south India, the male gender was significantly associated with health insurance (16).

Regarding the marital status and the association between willingness to join the scheme, singles were 87.7% less likely to join CBHI scheme (17), likewise, marital status was preventive determinant factor in study conducted by Kimani et.al household heads who are not in union were 43% less likely to participate in the public health insurance program than those who are currently in union.

According to the study conducted in rural Kenya on the Perceptions and uptake of health insurance for maternal care: a cross sectional study, marital status was significantly associated with health insurance uptake, married pregnant women are 6.4 times more likely to uptake health insurance than unmarried ones (19). In the study among reproductive age women in Kenya, married women are 80% more likely to be associated with having health

insurance compared to never married women (18), however marital status had no significant association as of the study conducted on community health fund membership in Tanzania (20).

According to the study conducted on determinants of enrolment in of informal sector workers in cooperative based health scheme in Bench district, house wives were 76% more likely to join CBHI scheme than farmers (17, 21).

But in the study conducted in Thehuledere district of Amhara region, merchants were 18% more likely to comply with CBHI scheme requirements than farmers (14), even though, occupational status had no bearing effect on health insurance status in the study conducted in rural population of India (16).

According to study conducted in Tanzanian on community health fund membership Households family size was positively associated with willingness to join CBHI , with each additional house hold member the chance of being member in the scheme increases by 4.3 percentage points (20). The same thing holds true in study conducted in Bench Maji zone, as number of family size increases the probability of willingness to join CBHI increases with 69 percentage points (17). In the same way larger households (5-6 members) were more likely to be enrolled in the cooperative based health schemes (21). The study done on Determinants of Rural Household's Willingness to Participate in Community Based Health Insurance Scheme in Edo State, Nigeria,2012,revealed that, household size was positively signed implying that respondents with larger families are more likely to be willing to participate in community based health insurance scheme than respondents with smaller households odd ratio of 1.7 that respondents with large household size were 1.7 times or 70% more likely to participate in CBHI scheme compared to those with smaller households (19).

In the study conducted on Determinants of Willingness to Join Community- Based Health Insurance Scheme in a Rural Community of North-Western Nigeria,2016, household who comprised of > 5 members had about 3 times more likely to join CBHI than members who constitutes five or less (22). However family size had no determining role in the study conducted on determinants of enrolment in health insurance, in the rural population of India (23).

2.7.2. Health and health related factors

Accessibility of health care facilities was positively associated with CBHI membership in the study of Mebratie et al., 2015 one standard deviation increase in travel time to health centers (45 min) increases enrolment by 3.6 percentage points. While the study conducted in Bench Maji zone revealed that distance of households from the nearest health facility measured by time unit was negatively associated with WTJ CBHI, in this study one minute increase to reach the nearest health facility is associated with 1.6% chance of being not willing to join CBHI (17).

In the study conducted on the piloted regions of Ethiopia, there is no evidence that households self-assessment of health status has bearing effect on community based health insurance enrolment. (11) but in the study conducted in Debub Bench district households self-reported health status has negative association with WTJ the scheme (17), likewise there is negative linkage between presence of chronic disease and enrolment as study done by Mebratie et al, 2015.

Coming to households' perceived quality of health care, There is a clear and discernible link between the quality of care on offer and CBHI uptake. For instance, availability of blood testing equipment in the closest health facility increases the probability of CBHI enrolment by 30 percentage points. Average waiting time to see a health care professional, a measure of quality in its own right and a proxy for facility staffing levels, exerts a negative effect on enrolment. A one standard deviation reduction in waiting time (28 min) is associated with a 14 percentage point increase in enrolment (11).

2.7.3. Socio-economic and client factors

As the study conducted on willingness to pay for voluntary health insurance in Tanzania 2011 and determinants of enrolment in voluntary health insurance in India, 2013, Enrolment in community-based health insurance schemes in rural Bihar and Uttar Pradesh, India, 2014. Determinants of enrolment of informal sector workers in cooperative based health scheme in Bangladesh, 2017 evidenced that house hold heads that had attained primary and above educational statuses had more likely probabilities to join the scheme than who had no formal education or no education at all (24, 23, 21). Estimated income of the household heads had both positive and negative association with CBHI uptake. The study conducted on determinants of enrolment in voluntary health insurance of India , 2013, higher estimated

income households had higher (2times)probability of having voluntary health insurance (25 , 22,15),but income level shown negative association ,that means households with estimated higher income were less likely willing to participate in CBHI than those with higher income (26). Evidences from literatures revealed that the households' heads from highest wealth index/ quintiles were more likely to be enrolled in CBHIs. For example the probability of having health insurance increased as household wealth index increased, women from wealthier households were 6 times more likely to have the scheme than poor households (18).

Similarly in comparing each wealth group with the poorest, poorest group are about 90% less likely to be enrolled in community health fund (20), likewise highest wealth quintiles were more than 4 times more likely to join CBHI schemes than the second wealth quintiles (17). However, the study conducted in the piloted regions of Ethiopia had revealed opposite result, in this study poorest households contributed largest share of beneficiaries (11).

In consideration of premium affordability, study participants who agreed on CBHI premium fee affordability were 2.6 times more likely to comply with CBHI requirements when compared with those respondents who disagreed (14).In the study conducted in rural India, if we see the affordability of the premium to the people, we can see that those people who can afford to pay were more likely to be insured (16).

Conceptual framework on CBHI enrolment

This conceptual framework shows that socio-demographic factors are distal factors affecting the uptake of CBHI and socioeconomic, scheme related, client and health related factors affect the CBHI scheme utilization proximally.

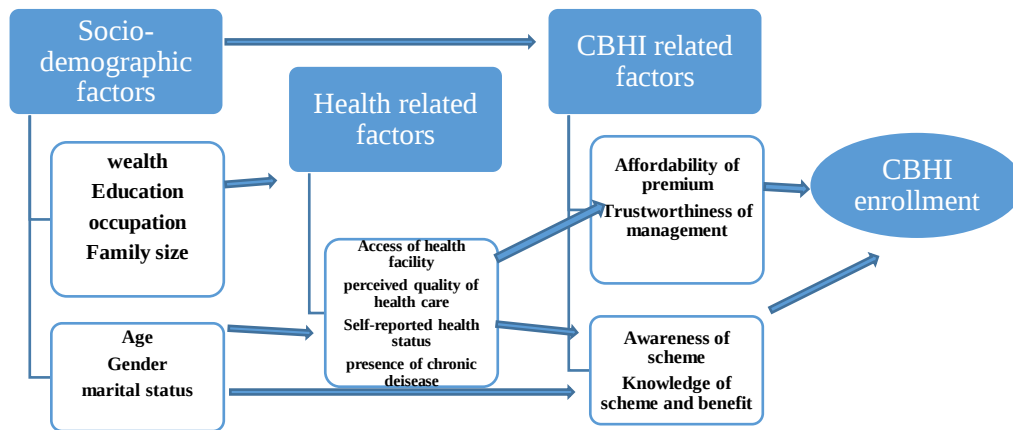


Figure 1: Conceptual framework on community based health insurance enrolment and associated factors among informal workers, adapted from (28)

CHAPTER THREE

3. Methods

3.1. Study design

A community based cross-sectional study design was employed to conduct the study.

3.2. Study area

The study was conducted in Amaro District, which is about 500 km away from Addis Ababa, the capital city of Ethiopia. According to Amaro district health office report the total population of this district was 197,692 of whom 96,869 were men and 100,823 were women. The district has 35-kebeles and its home for 39,538 households. The district has 43 health posts, 7 health centers, 1 hospital and 29 private clinics.

3.3. Study period.

The study period was from **August- May** 2019/2020.

3.4. Study population

All randomly selected households head/spouses with informal work in the of Amaro district.

3.5. Inclusion and exclusion criteria

3.5.1. Inclusion criteria

All household heads/spouses with informal work in the selected Kebeles of Amaro district.

3.5.2. Exclusion criteria

All household heads/spouses with formal work in the selected Kebeles of Amaro district.

3.6. Sample size determination.

The sample size was calculated by using single population proportion formula. The current status(2019 data) of National and SNNPR enrolment was averaged 43.4% and 40.2% respectively. Therefore; by using SNNPR enrollment:

$$n = \frac{[Z_{\alpha/2}]^2 p(q)}{D^2} = \frac{(1.96)^2 (0.402)(0.598)}{(0.05)^2} = 368$$

Where n=the desired sample size, p= CBHI coverage in pilot Woredas =critical value at 95% confidence level of certainty (1.96), D = margin of error between the sample and population=5%. By taking 10% non-response rate, the total sample size is (368+37) = 405

3.7. Sampling procedures

In this study multistage sampling method was applied, the district consists of 35 kebeles. Seven kebeles from 35 kebeles were selected by simple random sampling method that was 20% of the total Kebeles. Then the required sample size was proportionally allocated to each selected kebeles based on its number of households. Finally, lists of the households having house hold heads/spouses with informal work were obtained from district administration office (village register) and after getting the lists households (heads/spouses with informal work) from each selected kebeles, sample was selected by simple random sampling to get the required sample size.

Amaro district has 35 kebeles						
Simple random sampling 20% of kebeles included						
Kereda HH 1023	Gamule HH 1044	Kele F/A HH 1631	Kobo HH 1137	Dano HH 1819	Kore HH 2143	Shafule HH 905
Selected sample size						
43	44	68	47	76	89	38
Total sample size= 405						

Source: Own Computation

3.8. Data collection instruments

The study was used interview, that was adapted from Ethiopian Economic Association (EEA) and EDHS (7, 31). It has four parts, the first part contains socio-demographic characteristics, the second part questions related to CBHI utilization, the third part contains health and health related variables and fourth part addresses socioeconomic variables (wealth index).

3.9. Data collection methods

The data were collected by interviewer administered pretested structured questionnaire. The questionnaire initially prepared in English and then translated in to Amharic (local language of the study area) and then back in to English by those proficient in the language and checked for consistency. Training was given for data collectors and supervisors for two days on how to approach the study groups and fill the questionnaires. Data collection was carried out by house to house visit.

3.10. Study variables

3.10.1. Dependent variable

Community-based health insurance enrollment.

3.10.2. Independent variables

Socio-demographic factors: Age, household family size, education, occupation, marital status, wealth index.

Health related factors: household members self-reported health status, accessibility of health care facility, perceived quality of health care, presence of chronic disease in household members.

CBHI related factors: awareness of the CBHI, knowledge on CBHI, membership in social capital, affordability of premium and trustworthiness in scheme management.

3.11. Operational definitions

Community-based health insurance utilization: households that are members of CBHI scheme as verified by their renewed membership cards and currently new CBHI members are categorized as (utilizers) otherwise, those that are not members and those that are dropped out are categorized as (non-utilizers) of the CBHI (11),

Informal workers: households which live on agriculture, trade, and private micro businesses in rural and urban areas (27).

House hold wealth index: Households were given scores based on the number and kinds of consumer goods they own, these scores are derived using principal component analysis. Wealth quintiles are compiled by assigning the household score to each usual household member, ranking each person in the household population by her or his score (7).

3.12. Data Analysis procedures

The completeness and consistency of the data were checked then coded and entered in to SPSS version 23 for data processing and analysis.

Binary logistic regression was computed to calculate Crude Odds Ratio (COR) with its 95% confidence interval to test the associations between dependent and independent variables. Finally, multivariate analysis with Adjusted Odds Ratio (AOR) was computed to control for possible confounders and to identify factors significantly associated with CBHI enrollment. The fitness of the model was tested by Hosmer-Lemeshow goodness of fit test.

Drawing up on Gujarati (1988) and Aldrich and Nelson (1984) the logit distribution function for the participation in CBHI is specified as:

$$P_i = 1 / (1 + e^{-Z_i}) \dots\dots\dots(1)$$

Where P_i is the probability of enroll/participating in CBHI

Z_i is a function of n-explanatory variables(x) and expressed as:

$$Z_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} \dots + \beta_n X_{in} \dots\dots\dots(2)$$

Where:

β_0 is the intercept

$\beta_1, \beta_2, \dots, \beta_n$ are coefficients of the equation in the model

$$P_i = 1 / (1 + e^{-(\beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} \dots + \beta_n X_{in})}) \dots\dots\dots(3)$$

If P_i is the probability of participating/enrolling in CBHI scheme, then $(1 - P_i)$ the probability of not enrolled/participate in CBHI scheme can be written as:

$$1 - P_i = 1 / (1 + e^{Z_i}) \dots\dots\dots(4)$$

$$P_i / (1 - P_i) = 1 + e^{Z_i} / 1 + e^{-Z_i} = e^{Z_i} \dots\dots\dots(5)$$

Now $P_i / (1 - P_i)$ is simply the odds ratio in favor of participating in CBHI scheme.

It is the ratio of the probability that the household head will participate in CBHI scheme to the probability that he will not participate. Finally taking natural log of equation 5 we get:

$$L_i = \ln P_i / (1 - P_i) = Z_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} \dots + \beta_n X_{in} \dots\dots\dots(6)$$

Where, L_i is log of the odds ratio, which is linear not only in X , but also in the parameters.

Thus, if the stochastic disturbance term (U_i) is introduced, the logit model becomes:

$$Z_i = \beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} \dots + \beta_n X_{in} + u_i \dots\dots\dots(7)$$

In this study, the above model was used to analyze the data (32).

3.13. Data quality management

For effective and quality data collection training was given for two days for data collectors by principal investigator to achieve stated objectives: on thorough review of the questionnaire interview techniques, maintaining confidentiality and privacy of study subjects and direction as to how to administer the questionnaire. Supervisors were thoroughly checked the filled questionnaire before receiving from each data collector and they randomly selected the questionnaire to crosscheck its completeness. Double data entry was conducted to avoid/

minimize data entry errors and validate of the data. A unique identification number were given to each questionnaire as one variable in the data entry in to computer and multivariate analysis was done to control for confounding variables.

3.14. Ethical consideration

The data collection was initiated after the ethical clearance was obtained from Addis Ababa University College of Health and Medical Sciences. An official letter of cooperation was given to SNNPR health bureau. The district health office and the seven selected kebeles were asked for an official letter to get permission.

Data collectors were trained on how to handle confidentiality and privacy using consent form attached to each questionnaire. Confidentiality was assured by excluding study participants name during the period of data collection. The study purpose, procedure and duration, possible risks and benefits of the study were clearly explained for study participants. Data collectors informed participants to enroll in the study if they are willing, written informed and signed consent was taken from the respondents before data collection. Any study participant willing to engage in the study and those who want to stop interview at any time were allowed to do so.

3.15. Dissemination of results

The findings of this study will be disseminated to Addis Ababa University School of graduate study as partial fulfillment of master's degree thesis in public health/Health Economics. It will be also disseminated to SNNPR health bureau, and Amaro district health office and other concerned body. It will be tried to present in conferences and workshops and efforts will be devoted to publish the findings.

CHAPTER FOUR

4. RESULTS

4.1. Socio-demographic characteristics of study participants

A total of 389 households were included in the study with a response rate of 96%. The mean age of the respondents was 40.40 years, ranging from 20-77 years with standard deviation of 0.867 years. Two hundred seventy eight (71.7%) respondents were males. Majority 377(96.9%) of the respondents were Kore in ethnicity. Christians constitute more than ninety percent of the participants 355 (91.2%). About eighty one percent (316) of the respondents were married. Regarding educational status of respondents 105 (27%) had formal education and 284(73%) had no formal education. About sixty two percent of the respondents were farmers and resides in rural part of the district. The respondents had of 1 to 12 household family size ranges with mean of 1.52 and 0.5 standard deviations (Table 2).

Table 2: Socio-demographic characteristic of the study participants on factors influencing enrollment of community based health insurance, 2020. (n =389)

Attributes	Categories	Frequency (%)
Age	<=40	289 (74.3)
	>40	100(25.7)
Sex	Male	278(71.7)
	Female	111(28.5)
Ethnicity	Kore	377(96.9)
	Amhara	9(2.3)
	Tigre	3(0.8)
Religion	Orthodox	76(19.5)
	Muslim	34(8.7)
	Protestant	279(71.7)
Marital status	Married	316(81.2)
	Divorced	30(7.7)
	Separated	30(7.7)
	Widowed	7(1.8)
	Single	6(1.5)
Occupation	Non farmers	103(26.5)
	Farmers	286(73.5)
Educational level	Formal education	105 (27%)
	had no formal education	284(73%)

Source: Own Computation

4.2. Community-based health insurance utilization

The households respondents were asked about whether they had ever heard about community-based health insurance; about 264 (67.9%) responded that they heard about CBHI, but the remaining 125(32.1%) had not ever heard about CBHI. The source of their information was health professionals- 139 (35.7%), neighbors/friends- 92(23.7%), mass media- 32 (8.2%), and CBHI in public meeting- 1 (0.3%). Those who had information about CBHI were asked about whether they knew the service included in the benefit packages of CBHI: their responses were, only outpatient services included 75 (28.4%), only inpatient services included 62 (23.5%), and the remaining 127 (48.1%) did not know the benefit packages included in CBHI.

Among total households included in the study more than three fourth of the respondents 286 (73.5%) had poor knowledge about CBHI and only 103 (26.5%) had good knowledge about CBHI (Table 3).

Table 3: Knowledge questions and responses on factors influencing enrollment of community-based health insurance, in Amaro District, 2020.

Questions (right answer)	Responses					
	Correct		Incorrect		Do not know	
	Freq.	%	Freq	%	Freq.	%
Only those who fall sick should consider buying CBHI? (incorrect)	71	18.3	128	32.9	188	48.3
In the case of CBHI programs you have to pay premiums but do not know whether you will get the money back? (incorrect)	56	14.4	88	22.6	245	63
CBHI programme are like savings scheme; you will receive interest and get your money back? (incorrect)	61	15.7	50	12.9	278	71.5
CBHI programme you pay premiums in order for the CBHI to finance your future health care needs?(correct)	124	31.9	95	24.4	170	43.7
All health care costs will be covered by CBHI programs? (incorrect)	152	39.1	71	18.3	166	42.7
If you do not make claim any costs through CBHI your premium will be returned?(incorrect)	20	5.1	157	40.4	212	54.5

Source: Own Computation

Social networks provide the respondents the experience of benefiting from community-based health insurance; in this study more than 319 (82%) of the households had taken part in social networks , 91(23.4%), 58 (14.9%) , 30 (7.7%), 60 (15.4%) and 80 (20.6%) of the households had involved in *Idder*, *Ekub*, religious associations, *Debo* and saving and credit associations respectively.

Majority of the households (98.5%) currently have outstanding loans, the respondents mentioned 32 (8.2%) bank, 92 (23.7%) microfinance, 11 (2.8%) money lender, 2 (0.5%) relatives, and 246 (63.2%) friends/neighbors. The purposes of loan were inquired in this study, significant number 262 (67.4%), 38(9.9%), 36(9.3%), 28(7.2%) 19(10.5%), of households need loan for medical fee, food, production, trade and school fee respectively.

Out of 389 households involved in the study community-based health insurance enrollment was found to be 20.3%, among these households 2.6% were identified as the poorest by the district hence, their utilization was sponsored by the government. Two percentage (2%) of the households were utilizes but had not renewed their membership card.

4.2.1. Reasons for not being community based health insurance member

The reasons behind for not being member were Illness/injury does not occur frequently 71 (23%), registration and premiums are not affordable 65 (21%). The quality of health service is low 53(17%), lack of awareness about the scheme 121 (39%). Significant number, 310(79.7%) households were not member of community-based health insurance in this district.

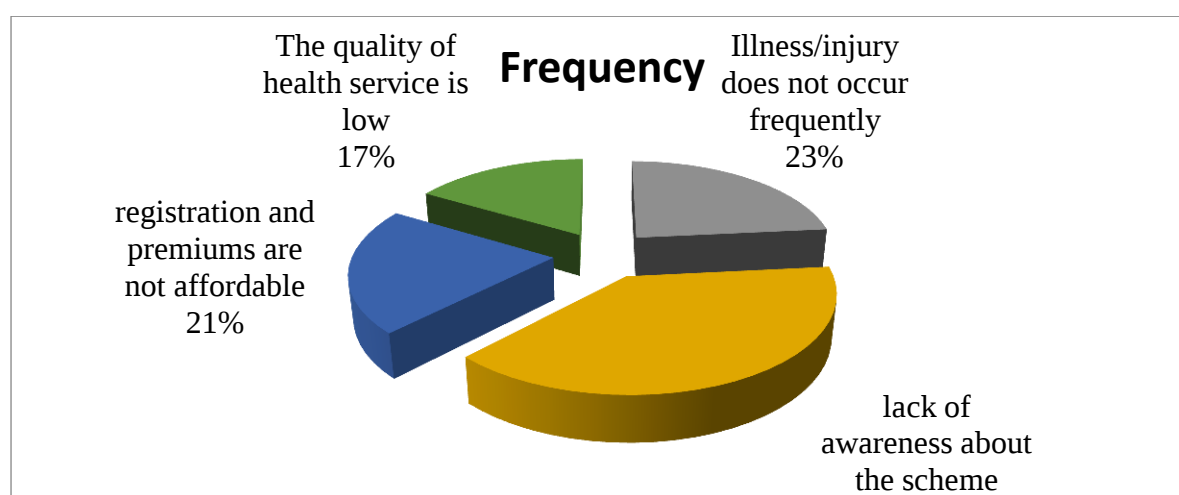


Figure 3: Pie chart depicting reasons for not being member in community-based health insurance in Amaro district, 2020. (n=310)

Table 4: Reasons for community-based health insurance enrollment among informal workers in Amaro District, 2020. (n=79)

Reasons for being member	Frequency	(%)
Illness/injury occurs frequently in household	52	65.82
Children needs health care	12	15.17
To finance health care expenses	9	11.39
Premium is lower than user fee	4	5.06
Pregnant women in the HH need health services	2	2.53
Total	79	100

Source: Own Computation

4.2. 2. Health and health related characteristics

With respect to health status and health related variables, 275 (70.7%) of the respondents described self-assessed health status of their household to be very good, 66 (17%) poor, 29 (7.5%) as good, and the remaining 19(4.9) very poor. One hundred forty three (36.8%) of the households had at least one member suffered from chronic disease (had symptom of disease for more than 30 days); concerning incidence of illness, 59(41%) of the households had at least one member who had encountered illnesses 3 months prior to data collection. Among the ill 56 (94.9%) had sought treatment for the illnesses encountered, and 50 (84.7%) got treatment. For the question that asked where the household got treatment in case the household members become sick 223 (57.3%) preferred to go to public health centers 110(28.3%) public hospital, and the remaining 56(14.4%) private health facilities.

Among the ill who sought health services, regarding the perceived quality of the service they received, 43.44% households' rated as very low, 22.13% low, and 34.4% neutral. Respondents preferred the specified institutions because of its physical accessibility 86 (22.1%), not too crowded 98 (25.2%), cheaper services 191(49.1%) and effective health service 14(3.6%).

The distance of home of the household to the nearest health facility was measured by the function of minutes and it was reported that the mean time it takes to reach the nearest health facility was about 50 minutes, ranging from 10 minutes to 215 minutes.

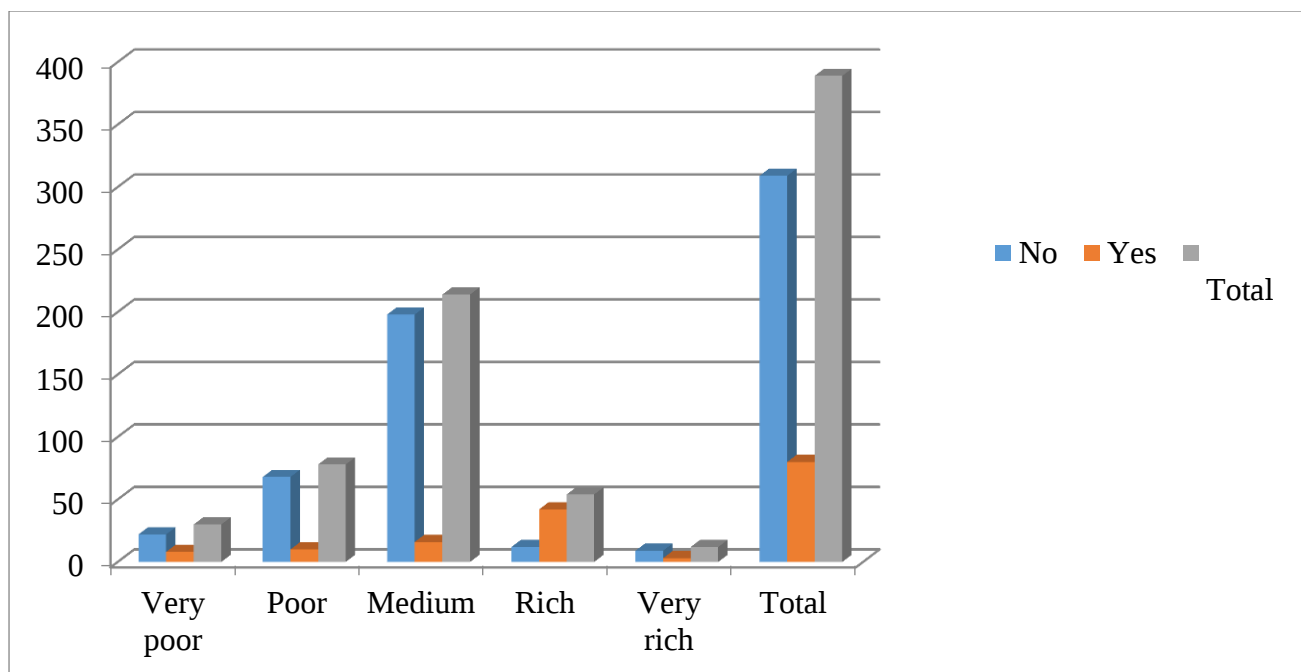


Figure 4: Bar chart showing the house holds wealth index and households enrollment status of community-based health insurance in Amaro district, 2020. (n=389).

4.3.1. Results of bivariate logistic regression analysis

In bivariate logistic regression factors associated with community-based health insurance enrollment: Age of the respondent of the household, sex, household family size, occupation, educational status of the household head, knowledge on CBHI, presence of chronic illness in the household, affordability of premium and wealth index of the household had relationship with community based health insurance enrollment at the specified P value of < 0.25 . These variables were selected as candidate for multivariate logistic regression for further analysis (Table 5).

The bivariate logistic regression depicts female household head respondents had about 3.6 times more likely utilized community-based health insurance than male headed household respondents and households having larger household family size had about 0.02 times more likely utilized community-based health insurance than households having smaller household family size [COR: 3.6 95% CI:[6.091 ,18]] and [COR:1.3 95% CI:[0 , 0.836]], respectively. Older household heads [COR:0.2 95% CI:[0.002,38.611]], those having formal education [COR:3.6 95% CI:[0.292 , 27]] and non farmers [COR:0.4 95% CI:[0.649,3.103]], good knowledge on CBHI [COR:2.70 95% CI:[0,0.192]]. Rich wealth index [COR:8.9 95% CI:[0.027,29]], household heads having chronic diseases [COR:1.8 95% CI:[1.8,18]], and

affordability of premium [COR:16 95% CI:[0.543,485]] were associated with CBHI utilization respectively (Table 5).

Table 5: Factors associated with community-based health insurance enrollment among informal workers in Amaro district, Bivariate logistic regression analysis,2020.(n=389)

Variable	Categories	CBHI enrollment		COR(95% CI)	P-value
		Yes	No		
		N0.(%)	N0.(%)		
Sex	Male	58(21.6)	220(87.4)	1	0.022
	Female	22(61.3)	89(38.7)	3.6 (6.091 ,18)*	
Family size	<=5	49(15)	279(85)	1	0.04
	>5	31(72.09)	12(27.91)	0.02 (0 , 0.836)*	
Age	Young age group(<=40)	8(6.9)	281(97.2)	1	0.6
	Old age group (>41)	72(72)	28(28)	0.2(0.002,38.611)*	
Educational level	Had Formal Education	40(38.1)	65(61.9)	3.6 (0.292 , 27)*	0.09
	No Formal Education	40(16.7)	244(83.3)	1	
Occupation	Non Farmer	68(34)	35(66)	0.4 (0.649,3.103) **	0.05
	Farmer	12(4.2)	274(95.8)	1	
Knowledge on CBHI	Poor	3(1.04)	285(98.9)	1	0.018
	Good	77(76.2)	24(23.8)	2.70 (0,0.192)*	
Wealth index	Very rich	14(18.2)	63(81.8)	1	0.09
	Rich	12(77.8)	66(22.2)	8.9(0.027,29)	
	Medium	24(20.2)	54(79.8)	1	
	Poor	15(7.2)	63(92.8)	1	
	Very poor	15(26.9)	66(73.1)	1	
Presence of chronic disease	Yes	55(93.2)	4(6.8)	1.8 (1.8,18)*	0.037
	No	25(7.6)	305(92.4)	1	
Affordability of premium	Disagree	107(65.6)	56(34.4)	1	0.1
	Agree	24(10.6)	202(89.4)	16 (0.543,485) **	

4.3.2. Results of multivariate logistic regression analysis

In multivariate logistic regression analysis: Age of the household heads, educational level, occupational level, socioeconomic variables: wealth index of household were community based health insurance related variables: knowledge on CBHI and affordability of premium were significantly associated with community-based health insurance enrollment in multivariate logistic regression analysis.

This study revealed that household heads age was significantly associated with community-based health insurance enrollment, accordingly household heads falling in age group of >41 years, (relatively older age groups) have about 3.7 more likely linked with CBHI enrollment[(AOR:3.7; 95% CI:[0.07,10)].

Similarly, educational level of the household head has significant association with community-based health insurance enrollment, house hold heads having formal education were about 1.3 fold more likely associated with community-based health insurance uptake than those who have no formal education [(AOR:1.3; 95% CI:[3.6,34)]. And occupational level of the respondents had statistically significant association with community -based health insurance use non farmers have about 3 times possibility of using health insurance than farmers [(AOR : 3 ; 95% CI: [0.9, 80)].

Knowledge on community-based health insurance has positive impact on community-based health insurance utilization. This study depicted, respondents having good knowledge on community-based health insurance had about 2.7 times more likelihood of utilizing health insurance than those having poor knowledge [(AOR: 2.7 ; 95% CI : [0,0.192)].

Affordability of the premium was negatively associated with community-based health insurance utilization. Respondents that were disagree with premium affordability were about 0.6 times prevented from utilizing community-based health insurance than those that agree [(AOR: 0.6 95% CI:[0.02, 1.842)]. (Table 6).

Table 6: Factors associated with community-based health insurance enrollment among informal workers in Amaro district, Multivariable analysis, 2020. (n=389)

Variable	Categories	CBHI enrollment		COR(95% CI)	AOR(95% CI)
		Yes	No		
		N0.(%)	N0.(%)		
Sex	Male	58(21.6)	220(87.4)	1	1
	Female	22(61.3)	89(38.7)	3.6 (6.091 ,18)*	3.01(5.5,16) *
Family size	<=5	49(15)	279(85)	1	1
	>5	31(72.09)	12(27.91)	0.02 (0 , 0.836)*	7.3(0.13,4) *
Age	Young age group(<=40)	8(6.9)	281(97.2)	1	1
	Old age group (>41)	72(72)	28(28)	0.26(0.002,38.611)*	3.76(0.07,10) *
Educational level	Had Formal Education	40(38.1)	65(61.9)	3.6 (0.292 , 27)*	1.31(3.6,34) *
	No Formal Education	40(16.7)	244(83.3)	1	1
Occupation	Non Farmer	68(34)	35(66)	0.4 (0.649,3.103) *	3 (0.9, 80) *
	Farmer	12(4.2)	274(95.8)	1	1
Knowledge on CBHI	Poor	3(1.04)	285(98.9)	1	1
	Good	77(76.2)	24(23.8)	2.70 (0,0.192)* *	2.70 (0,0.192)**
Wealth index	Very rich	14(18.2)	63(81.8)	1	1
	Rich	12(77.8)	66(22.2)	8.9 (0.4,75) *	0.017(0,2.107) *
	Medium	24(20.2)	54(79.8)	1	1
	Poor	15(7.2)	63(92.8)	1	1
	Very poor	15(26.9)	66(73.1)	1	1
Presence of chronic disease	Yes	55(93.2)	4(6.8)	1.8 (1.8,18)*	0.024(0.,0.574) *
	No	25(7.6)	305(92.4)	1	1
Affordability of premium	Disagree	107(65.6)	56(34.4)	1	1
	Agree	24(10.6)	202(89.4)	16 (0.543,485) *	0.6 (0.02, 1.842) *

Significant association at P value < 0.001 = ** P value < 0.05 = *

CHAPTER FIVE

5. DISCUSSION, CONCLUSION AND RECOMMENDATION

5.1. DISCUSSION

Community-based health insurance begun in Amaro district since 2014. In this study the prevalence of community-based health insurance enrollment was found to be 20.3% [(95% CI:[23.8, 31.2)]. Covariates like: Relatively older ages, having formal education, non farmers, and disagree on affordability of premium and good knowledge on CBHI had statistically significant association with community-based health insurance enrollment.

This study found the enrollment of community-based health insurance to be 20.3%. This finding was lower compared to the Ethiopian health sector transformation plan which sets a target of increasing the proportion of people enrolled in health insurance to 80% (3). It was also lower compared to the evidence found during Evaluation of Community-Based Health Insurance Pilot Schemes in 2015. The enrolment rate in the piloted area was found to be 67% in Dimbitchu and Damboya, 62% in south Achefer, and 38% in Fogera (29).

Likewise, Thehuledere districts households CBHI enrolment rate was 94% (14). USAID in 2011-14 in the piloted districts found average CBHI enrolment rate as 52.4% of eligible households, six woredas having enrolment rate higher than 60%, with 100% coverage in Yirgalem woreda and 91% in Tehuledere, 35% Deder (12), compared to this areas still CBHI utilization in Amaro district was found to be low.

The health insurance experiences of sub-Saharan Africa revealed that the coverage of eligible people since 2005/2007 had ranged from 1.5-2%, below the current utilization in Amaro district. But Mutual Health organization (MHO) is scheme like CBHI in West African countries like Ghana, Mali and Senegal in this scheme the enrolment rate of these countries range from 30 to 50% (Ghana 34%, Mali 31% and Senegal 50%) (30).The enrolment in MOH (Mutual Health Organization) scheme is higher than that found in this study. These differences in enrolment rate may be attributed to socio-cultural, socio-economic, educational and political commitment of these countries.

Multivariate logistic regression analysis shows household family size was a significant determinant of enrollment in the scheme. This finding is similar with those of other studies (34). Larger households were more likely to purchase the insurance than smaller ones. This was attributed to the huge financial burden that large households faced at times of risk.

Besides, when many members family live together in a single unit, there may be the chance of sharing different ideas for making good decisions (33).

The study revealed that household heads age was significantly associated with community-based health insurance enrollment; accordingly household heads falling in age group of > 41years, (relatively older age groups) have about 3.7 times more likely linked with CBHI enrollment. That is as family head become older and older their demand to participate in the scheme will get maximized. This result is supported by study conducted in Kenya (15). This might be due to the fact that older individuals have relatively weaker immunity and prone to sickness than younger individuals and with anticipated fear of sickness in older ages hence buying health insurance with minimum cost they secure maximum health care benefit.

This study shown that educational level of the household head has significant association with community-based health insurance enrollment, house hold heads having formal education were about 1.3 fold more likely associated with community-based health insurance uptake than those who had no formal education. This finding is consistent with the study conducted in Kenya where women who had primary and secondary level of education had higher likelihood of health insurance coverage than those who had no formal education, like wise better education was associated with high probability of being insured in the study conducted in rural Senegal (19). This is interpreted as educated people understand the benefits packages, working principles and mechanisms of risk sharing in health insurance hence would uptake health insurance.

Occupation of the respondents had statistically significant association with community- based health insurance use, in this study; non farmers have about 3 times possibility of using health insurance than farmers. This finding is not in line with the findings of study done in Thehuldere district and Edo state of Nigeria where merchants and others had shown less likely requirement compliance and willingness to pay for community based health insurance than farmers (14, 26). But in the study conducted in a rural part of Bahir and Uttar Pradesh in India (23), the household head's occupation did not have bearing on participation in CBHI schemes. This discrepancy might be due to the difference in occupational composition of the society. And it may be due to scheme's interval of payment which is once in a year, harvesting season that may not suits farmers to buy the scheme.

Knowledge of community-based health insurance has positive impact on community-based health insurance enrollment. This study depicted, respondents having good knowledge of community-based health insurance had about 2.7 times more likelihood of utilizing health

insurance than those having poor knowledge. This finding is supported by study conducted in rural Kenya which revealed knowledge is positively associated with health insurance uptake (14, 19). This may be attributed to the fact that knowledge changes the health seeking behavior of the individuals and enhances the understanding of the pros and cons of the health service program leading to enrollment.

This study revealed that wealth index of the households had statistically association with community-based health insurance enrollment. This finding was in line with other literatures that the households' heads from highest wealth index were more likely to be enrolled in CBHI, the probability of having health insurance increased as household wealth index increased; women from wealthier households were 6 times more likely to have the scheme than poor households (15). Likewise highest wealth quintiles were more than 4 times more likely to join CBHI schemes than the second wealth quintiles (17).

Affordability of the premium had negatively associated with community-based health insurance enrollment in this study. Households that were disagree with premium affordability were prevented from utilizing community-based health insurance than those that agree. This finding is supported by the study conducted by Samuel *et al*, 2017.

Affordability issue may be related to the ability to pay the premium, those households that can not pay the premium were deterred from subscription in CBHI hence end up in lesser enrollment.

5.1.1 Strength and limitation of the study

Concerning the limitation and strength of the study, as limitation this study had recall and social desirability bias because the respondents were asked about events that occurred in the past. Most of literatures regarding CBHI in developed countries stress on social health insurance and its magnitude thus limited the researcher to include in the literature review.

As strength the response rate was 96 % and study was community based that enabled generalizability of the study findings to the population. Moreover this is the first study of its kind in the study area and believed to provide useful information for the existing health care service.

5.2 CONCLUSION

Community-based health insurance utilization in this study was found to be low in the study area.

Age of the house hold heads, sex, educational level, occupation, knowledge of CBHI and affordability of premium had statistically significant association with community based health insurance enrollment. Therefore, in-depth and sustainable awareness creation programs on the scheme, stratified premium based on the economic status of households, incorporation of social capital factors, particularly community solidarity in the scheme implementation are vital to enhance sustainable enrollment.

Moreover, as chronic diseases was significant determinant of enrollment. The Government may need to look for options to make the scheme enrollment to be high.

5.3. RECOMMENDATIONS

- ❖ District health insurance officials in collaboration with Kebele health insurance initiative/ health extension workers, Kebele managers and community representatives:
 - Should prepare health insurance education sessions to enhance the communities' knowledge on insurance concepts in general and CBHI principles in particular to increase utilization
 - Should disseminate information to create awareness on CBHI (Initiatives to overcome this lack of awareness included regular house visits, awareness campaigns, mass media, and sensitization by scheme staff, scheme members and local churches) to promote utilization.
- ❖ Regional health insurance steering committee in collaboration with district health insurance management officials:
 - Should device mechanisms to fairly represent the poorest households to address inequities that arise in CBHI like matching premiums with socioeconomic status.
 - Should strengthen discussion with the community on benefit packages to meet communities' health care needs.
 - Should strengthen their discussion on premium affordability to make it affordable and include large segment of the community.
 - Should strengthen their work on the quality of health service provided to meet expectation of the society.

Finally, further research is required to identify and analyze determining factors to participate in CBHI scheme. Moreover, studies have to intensively study both demand and supply side determinants that could enable to direct and design directives.

REFERENCES

1. Feyisa S., Demand to pay for community based health insurance, 2016.
2. Federal Democratic Republic of Ethiopia Ministry of Health, Health Care Financing Strategy 2017 – 2025, 2017: Addis Ababa Ethiopia.
3. Federal Democratic Republic of Ethiopia Ministry of Health, Ethiopia's Health Sector Transformation Plan (HSTP) (2015/16-2019/20 GC OR 2008 – 2020EFY),2018, mid-term review volume I.
4. OECD Private Health Insurance in OECD countries, 2004. Paris: OECD.
5. Community-Based Health Insurance Training Manual, Federal Ministry of Health.
6. WHO, The world health report: health systems financing, : the path to universal coverage, 2010.
7. EDHS, Ethiopia Demographic and Health survey, 2016. Available at <https://dhsprogram.com/pubs/pdf/FR328/FR328.pdf>. Accessed on August 12/2019.
8. Federal Democratic Republic of Ethiopia Ministry of Health, Seventh health accounts, 2016/17: statistical report,2019.
9. Hailemariam D., Exploring alternatives for financing health care in Ethiopia: An introductory review Article: policy and human resource development project Ethiopian social sector studies; health sector review; synthesis and summary, 1996: Addis Abeba.
10. Hailemariam D.,Health Care and Financing Strategy, Ministry of Health, Ethiopia,1998: Addis Abeba.
11. Mebratie, A. D, Sparrow, R., Alemu, G., Bedi, A. S,Yilma Z.,Enrollment in Ethiopia's Community-Based Health Insurance Scheme, World Development,2015.74:5876.
12. USAID, Ethiopia's Community-based Health Insurance: A Step on the Road to Universal Health Coverage, 2014: Ethiopia. Available at <https://participedia.net/en/cases/communitybased-health-insurance-ethiopia>. Accessed on 12/07/2019.
13. Ethiopian Health Insurance Agency, Evaluation of Community-Based Health Insurance Pilot Schemes in Ethiopia, 2015. Available from <https://www.hfgproject.org/wpcontent/uploads/2015/05/CBHIEvaluation-5-2015.pdf>. Accessed on 12/07, 2019.
14. Samuel GW,Gashaw AB,Solomon AW, Community based health insurance and communities scheme requirement compliance Thehulederedistrict ,North east

Ethiopia: cross sectional community based study, ClinicoEconomics and Outcomes Research,2017.

15. Kimani JK, Ettarh R , Kyobuntungi C, Mberu B, Muindi K, Determinants for participation in health insurance program among residents of urban slum of Kenya , Nairobi ,results from cross sectional survey, BMC Health service research, 2012. 12:66.
16. Sudhir, ChaitraM,Deepa K.,Determinants of Health Insurance in rural population of South India. Indian Journal of forensic and community medicine, 2015.2 (3): p. 172-175.
17. Melaku H, ShimelesO,Berhane M., Willingness to join community-based health insurance District, Bench Maji Zone, Southwest Ethiopia, BMC Public Health, 2014.
18. Kimani JK, Ettrah R, Warren C, BellosB.,Determinants of health insurance ownership among women in Kenya: evidence from the 2008–09 Kenya demographic and health survey. International Journal for equity in health,2014. 13: 27.
19. Maina JM, KithukaP,Tororie S.,Perceptions and uptake of health insurance for maternal care in rural Kenya: a cross sectional study. Pan African medical journal, 2016. 1:15.
20. MachaJ, Kuwawenaruwa A, Makawia S, MtieG,Borghi J., Determinants of community health fund membership in Tanzania: a mixed methods analysis. BMC Health service research,2014.
21. Sarker AR, Sultan M,Mahumud RA, Ahmed S,IslamZ,Morton A, Khan JA.M.,Determinants of enrollment of informal sector workers in cooperative based health scheme in Bangladesh. PLoS ONE, 2017.12(7): p.1-12.
22. Gobir AA, Adeyemi AO, AbubakarAA,AuduO,Johua IA.,Determinants of Willingness to Join Community- Based Health Insurance Scheme in a Rural Community of North- Western Nigeria. African Journal of health economics, 2016.
23. Panda P, Chakraborty A, DrorDM,Bedi AS.,Enrolment in community-based health insurance schemes in rural Bihar and Uttar Pradesh, India. Health policy and planning,2014.
24. Kuwawenaruwa A, MachaJ,Borghi J.,Willingness to pay for voluntary health insurance in Tanzania. East African Medical Journal,2011. 88(2): p.55-64.
25. VellakkaS.,Determinants of Enrolment in Voluntary Health Insurance: Evidences from a Mixed Method Study, Kerala, India .International journal of financial research,2013. 4 (2): p.99-107.

26. Oriakhi HO, OnemoleaseEA.,Determinants of Rural Household's Willingness to Participate in Community Based Health Insurance Scheme in Edo State, Nigeria.Ethno Med, 2012.6(2): p. 95-102.
27. Community Based Health Insurance guide line of SNNPRS regional health bureau, 2017. Hawassa, Ethiopia (personal communication).
28. Dror DM, Hossain SA, Majumdar A, Perez Koehlmoos TL, John D, Panda PK. What factors affect voluntary uptake of community-based health insurance schemes in low- and middle-income countries? A systematic review and meta-analysis, 2016.
29. Ethiopian Health Insurance Agency. (2015). Evaluation of Community-Based Health Insurance Pilot Schemes in Ethiopia. Available from <https://www.hfgproject.org/wp-content/uploads/2015/05/CBHEvaluation-5-2015.pdf>. Accessed June 6, 2020.
30. Chankova S, Sulzbach S, Diop F. (2008). Impact of mutual health organizations: evidence from West Africa. *Health Policy Plan*, 23:264-76.
- 31.Ethiopian Economics Association Poverty Dynamics, Health Shocks and Coping Strategies in Ethiopia HOUSEHOLD QUESTIONNAIRE, Second follow-up Survey (April 2013).Obtained communications through email.
32. Gujarati, D.N., 1988. Basic Econometrics. Second edition. McGraw Hill, Inc.New York.
33. Jude A, Atanga S, Falang C, Nso E. (2018) Factors associated with Non Enrollment into Community Based Health Insurance Schemes in the Bamenda Health District, Cameroon. *Int J Public Health Epidemiol Res.*;4(2).
34. Kebede A, Gebreslassie M, Yitayal M. (2014) Willingness to pay for community based health insurance among households in the rural community of Fogera District, north West Ethiopia.;2(4):263–9.

APPENDICIES

Appendix A: Participant information sheet and informed consent form (English version)

My Name is-----, I am working as a data collector for the study being conducted in this community for his master's degree at Addis Ababa University, the college of health science. I kindly request you to give me your attention to explain you about the study and being selected as a study participant.

Study title: Assessment of factors influencing enrollment of community-based health insurance scheme among rural house holds in Amaro district of SNNPR, Ethiopiain 2020.

Back ground: Community-based Health Insurance (CBHI) is a not-for-profit type of health insurance in which members regularly pay small premiums into a collective fund. Which is then used to protect themselves against the high costs of seeking medical care and treatment for illness and it covers the poor, unemployed and those living in the rural areas. It has an advantage of minimizing the equity gap and reducing out-of-pocket spending, increase awareness regarding the value of insurance, building self-belief among participants through community control mechanisms, and enhancing utilization of the health care system.

Aim of study: The finding of this study will have a paramount merit for the woreda health office to plan intervention programs to identify factors associated with CBHI uptake to enroll large segment of the population in the program there by improve community health and survival. Moreover; the aim of this study is to write a thesis as a requirement for the partial fulfillment of Master's degree.

Procedure and duration: I will be interviewing you to assess factors that influence the Community-based health insurance enrollment using questionnaire. The answers you provide me with pertinent data are helpful for the study. There are about 51 questions to answer where I will fill the questionnaire by interviewing you. The interview will take 30 minutes, so kindly request you to give attention this time for the interview.

Risks and benefits: There is no any harm happen on you by participation in this study except taking few minutes from your time. There will not be any direct payment for participating in this study, but the findings from this study may give important information for the district health office planners.

Confidentiality: The information you will provide us will be confidential. There will be no information that will identify you in particular. The findings of the study will be general for the study community and will not reflect anything particular of individual person or housing. The questionnaire will be coded to exclude showing names. No reference will be made in oral or written reports that could link participants to the research.

Rights: Participation for this study is fully voluntary. You have the right to declare to participate or not in this study.

If you decide to participate, you have the right to withdraw from the study at any time and this will not label you for any loss of benefits which you otherwise are entitled. You do not have to answer any question that you do not want to answer.

Contact address: If there are any questions or enquires any time about the study or procedures, please contact in this address.

Principal investigator: ZerihunBeriso : email; zerihunberiso@gmail.com

Mobile phone: 0916100724

Declaration of informed voluntary consent:

I have read/ was read to me the participant information sheet. I have clearly understood the purpose of the research, the procedures, the risks and benefits, issues of confidentiality, the rights of participating and the contact address for any queries. I have been given the opportunity to ask questions for things that may have been unclear. I was informed that I have the right to withdraw from the study at any time or not to answer any question that I do not want. Therefore, I declare my voluntary consent to participate in this study with my initials (signature) as indicated below.

N.B: This is to be signed face to face in the presence of the data collector. Please provide a copy of this signed consent to the participant.

Signature of the participant----- Signature of data collector-----

Thank you for your cooperation!!!!

Appendix B: English version Questionnaire

This questionnaire is prepared for collecting information on factors influencing enrollment in Community based health insurance and implementation challenges in Amaro district, SNNPR, Ethiopia, 2020.

Kebele: _____ House code _____

Name of Data Collector: _____ Signature _____ Date: _____

Name of Supervisor: _____ Signature _____ Date: _____

Part one: Socio-demographic characteristics of the respondents

No	Question	Response options	Code	Skip
101	Age of the respondent?	Age in years-----		
102	Residence of the respondent?	1.Urban 2.Rural		
103	Sex of the respondent?	1.Male 2.Female		
104	Ethnicity?	1.Kore 2.Amhara 3.Tigre 4.Oromo 5.Others(Specify)-----		
105	Religion?	1. Orthodox 2. Muslim 3. Protestant 4.Others(specify) _____		
106	Current marital status?	1. Married 2. Divorced 3. Separated 4.Widowed 5.Single		
107	Number of individuals in the household?	Number-----		
108	What is your educational level?	1.Unable to read and write 2. Able to read and write 3. Primary education 4 .Secondary education 5. College and above		
109	What is your occupation?	1. House wife 2.Farmer 3. Merchant 5. Other (specify) -----		

Part two: Questions related community based health insurance.

No	Question	Response options	Code	Skip
201	Have you ever heard about CBHI scheme?	1.Yes 2.No		205
202	From whom you heard about CBHI scheme?	1. neighbors/friends 2.CBHI officials in public meeting 3.CBHI house to house awareness creation campaigns 4. mass media: ETV, radio 5.health professionals in health facilities 6.other(specify) _____		
203	Do you know health services	1.Yes		

	covered under CBHI scheme?	2. No		
204	Which services do you know CBHI benefit covers?	1.Inpatient 2.Outpatient 3. both in and out patient 4.Abroad treatment 5.Cosmetic surgeries		
Questions related to knowledge of CBHI (Q 205-Q 210)				
205	Only those who fall sick should consider buying CBHI?	1.Correct 2.Not correct 3. Do not know		
206	In the case of HI/CBHI programs you have to pay money (premiums) but do not know whether you will get the money back?	1.Correct 2.Not correct 3. Do not know		
207	HI/CBHI programme are like savings scheme; you will receive interest and get your money back?	1.Correct 2.Not correct 3. Do not know		
208	In HI/CBHI programme you pay money (premiums) in order for the CBHI to finance your future health care needs?	1.Correct 2.Not correct 3. Do not know		
209	All health care costs will be covered by CBHI programs?	1.Correct 2.Not correct 3. Do not know		
210	If you do not make claim any costs through CBHI your premium will be returned?	1.Correct 2.Not correct 3. Do not know		
211	Are you member in CBHI? (for yes check membership card)	1.Yes 2.No		219
212	Date of member ship card owned?	-----/-----/----- (dd /mm/yy)		
213	Reasons for being member?	1.Illness and/or injury occurs frequently in the household 2.Pregnant women in the household need health care services 3.Child/children in the households need health care services 4.To finance health care expenses 5.The household is exempt from registration fee and premium 6.Premium is low compared to user fee 7.Pressure from CBHI officials 8.Other (specify)-----		
214	Have you renewed your membership card? (yes : check card)	1.Yes 2.No		217
215	Reasons for renewing?	1.Illness and/or injury occurs frequently in our household 2.Pregnant women in our HH needed health care services 3.Child/children in our HH needed health care services 4.To finance unexpected health care expense 5.Premium is low compared to the user fee 6.Pressure from the CBHI/ kebele officials		

		7.Pressure from other members/community 8. Other (specify)-----		
216	Reasons for not renewing?	1.Illness and/or injury does not occur frequently in our household 2.The registration fee and premiums are not affordable 3.Lack of awareness about the detail of how the CBHI works 4.The quality of health care services is low 5.The benefit package does not meet our needs 6.CBHI management staff is not trustworthy		
217	Do you have planned to renew?	1.Yes 2.No		
218	Premium for membership payment?	1.Yes 2.No		
219	Reasons for not being member?	1.Illness and injury does not occur frequently in the household 2.The registration fee and premiums are not affordable 3.Want to wait in order to confirm the benefit 4.Lack of awareness about the scheme 5.Shortage of money 6.Limited availability of health services 7. Quality of health care services is low 8.CBHI management staff is not trustworthy 9. Other (specify)-----		
220	The timing/time interval of premium payment is convenient for my household	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree		
221	The CBHI registration fee is affordable for my household.	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree		
222	The CBHI regular contribution (premium) is affordable for my household.	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree		
223	The CBHI management officials are trustworthy.	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree		
224	Have you ever been member of social association?	1.Yes 2.No		226
225	Which social association you are /were member?	1.Debo 2.Equb 3. Iddir/kire 4.Credit and saving 5.Religious association		
226	Does your household currently have any outstanding loans?	1.Yes 2.No		
227	Source of loan	1.Bank 2.Microfinance 3.Money Lender 4.Relatives 5.Friends/Neighbors 6.Other (specify)----- --		

228	Purpose of loan request?	1.Production 4.Wedding 7.Food	2.School fee 3.Medical fee 5.Holiday 6.Funeral 8.Trade		
-----	--------------------------	-------------------------------------	--	--	--

Part three: Health related questions

No	Question	Response options	Code	Skip
301	In general, how do you describe the health status of this household member now?	1.Excellent 2.Very good 3.Good 4.Poor 5.Very Poor		
302	Where do you get treatment when any family member becomes sick?	1.Private Health Facility 2.Public health Centre 3. Public hospital 4. self-treatment, 5. traditional healer 6. local drug vendor		
303	Reasons for going there?	1.The HF was physically accessible 2. The HF was not expensive 3.The health facility not too crowded(Short-waiting time) 4.The health service was effective.		
304	Does this household member suffer from a chronic disease?(symptoms have been going on for more than 30 days)	1.Yes 2.No		
305	Any illness encountered during the past 3 months?	1.Yes 2.No		312
306	Seek medical treatment for the recent episode?	1.Yes 2.No		
307	Get treatment?	1.Yes 2.No		309
308	Reasons for not getting treatment?	1. Health facility too far 2. No enough money 3. Disease is self- limiting		
309	Coverage of the health care cost?	1.Self 3.Free 2.Community		
310	How much do you pay for health care per visit?	Payment in birr.....		
311	Do you think that the payment is costly for you?	1.Yes 2.No		
312	Perceived quality of the health care service given?	1.Very low 2.Low 3.Neutral 4.High 5.Very high		
313	How much minutes do you take to walk to get nearest health facility from your home?	1. Health center..... 2. Health post..... 3. Public Hospital..... 4. Private clinics.....		
314	Distance in kilometers?	1. Health center..... 2. Health post..... 3. Public Hospital..... 4. Private clinics.....		

Part four: Questions to assess the current family wealth

Could you tell me if you have the following ?

LIVESTOCK	In the past 12 months, have members of your household own the following animals		Code
	No(0)	Yes(1)	
1.Oxen			
2.Cows			
3.Breeding bulls			
4.Calf			
5.Sheep			
6.Lamb			
7.Beehives			
8.Goat			
9.Horse			
10.Donkey			
11.Chicken			
12.Mules			
13.Pigs			
14.Heifers			
15. Other (specify_____)			
AGRICULTURAL EQUIPMENT, HOME EQUIPMENT AND MACHINERY			
1. Hoe			
2. Plough			
3. Hammer			
4. Saddle			
5. Cart (animal drawn)			
6. Weaving equipment			
7. Mill			
8. Sickle			
9. Chopper/knife			
10. Shovel/spade			
11. Modern beds			
12. Chairs/bench			
13. Fanos			
14. Radio/TV (working)			
15. Computer/laptop			
16. Mobile/cell-phone/wireless			
17. Mesob/sefedetc			
18. Iron			
19. Cupboard			
20. Leather pouch			
21. Mehegia (leather sofa)			
22. Leather mat			
23. Jewelry/gold/wrist watches			
24. Guns			
25. Gotea			
26. Kitchen utensils			
27. Beehive			
28. Barrel			
29. Table			
30. Car (s)			
31. Tractors			
32. Bicycle			
33. Knapsack sprayer			
34. Water pump			
35. Motorbike			
36. Modern stove			
37. Other (specify)			
38. Other (specify)			

Thank you !!!!!

አባሪ ሀ: የተሳታፊዎች መረጃ መስጫ እና የስምምነት መግለጫ ቅጽ

ስሜ ----- እባላለሁ። ለሁለተኛ ድግሪ ማሟያ በዚህ አካባቢ በሚካሄደው ጥናት እንደ መረጃ ሰብሳቢ ሆኜ እየሰራሁ እገኛለሁ። የዚህ ጥናት ተሳታፊ መሆንዎን እና ስለ ጥናቱ በቂ ገለፃ ለማድረግ ትኩረትዎን እንዲሰጡኝ እፈልጋለሁ።

የጥናቱ ርዕስ፡- በ2012 ዓ.ም በደ/ብ/ብ/ህ/ክ/መ በአማሮ ወረዳ የማህበረሰብ አቀፍ የጤና መድሀኒት ተሳትፎ ተግዳሮቶች ምክንያቶች ምን እንደሆኑ የዳሰሳ ጥናት ማካሄድ ።

መግቢያ፡- የማህበረሰብ አቀፍ የጤና መድሀኒት ማለት በትርፍ ላይ ያልተመሰረተ የጤና መድሀኒት አይተት ሲሆን አባላት በመደበኛነት አነስተኛ መዋጮ ወደ አንድ ቋት የሚያዋጡነት ነው። በአንድ ቋት የተሰበሰበውም ገንዘብ አባላቱን ከከፍተኛ የሕክምና ወጪ የሚታደግ እና የድሃ-ድሃ ስራ አጥና በገጠር አካባቢ የሚኖሩት ተጠቃሚ እንዲሆኑ ያደርጋል። ይህም ፍትሃዊነትን የሚያረጋግጥ ሲሆን ከኪስ ክፊያን ይቀንሳል ፤ ስለመድሀኒት ያለውን ግንዛቤም ይጨምራል ፤ በአባላት መካከል በራስ መተማመንን መጨመርና የጤና አገልግሎት ተጠቃሚነትን ይጨምራል።

የጥናቱ ዓላማ ፡-የዚህ ጥናት ውጤት ለወረዳ ጤና ጽ/ቤት ዕቅድ ለማቀድና ከማህበረሰብ አቀፍ የጤና መድሀኒት ጋር ተጓዳኝነት ያላቸውን ተግዳሮቶችን በመለየት የማህበረሰቡን ጤና ለማሻሻልና ጤናማ ማህበረሰብ ለመፍጠር ከፍተኛ አስተዋፅኦ አለው።

የጥናቱ ቅደም ተከተል እና ቆይታ፡- የተዘጋጀ መጠይቅ በመጠቀም የማህበረሰብ አቀፍ የጤና መድሀኒት ተሳትፎ ተግዳሮቶች ምክንያቶችን ለመዳሰስ ቃለ-መጠይቅ አደርግሎታለሁ። የሚሰጡኝ ተጨባጭ የሆኑ መረጃዎችን ለጥናቱ እጅግ አስፈላጊ ናቸው። መጠይቁም 51 ጥያቄዎች ያሉት ሲሆን እርሶ መልሱን ስነግሩኝ እኔ እሞላቸዋለሁ።ቃለ-መጠይቁ 30 ያህል ደቂቃ የሚፈጅ ሲሆን በዚህ ጊዜ የእርስዎን ትኩረት እሻለሁ።

ጉዳትና ጠቀሜታ፡-የተወሰነ የእርሶን ጊዜ ከመሻማት በዘለለ በዚህ ጥናት በመሳተፍዎ የሚደርስብዎ ምንም ዓይነት ጉዳት አይኖርም። በጥናቱ በመሳተፍዎም በቀጥታ የሚከፈልዎት ክፍያ የለም ነገሩ ግን የወረዳው ጤና ጽ/ቤት ከጥናቱ ጠቃሚ የሆኑ መረጃዎችን ያገኛል።

ምስጥራዊነት፡- ማንኛውም የሚሰጡኝ መረጃ ምስጥራዊነቱ የተጠበቀ ነው። እርስዎን በተለይ የሚገልፅ ምንም ዓይነት መረጃ አይኖርም። የጥናቱን ውጤት ባጠቃላይ የማህበረሰቡን ሁኔታ የሚገልፅ እንጂ ግለሰብን ወይም ቤተሰብን በተለይ የሚገልፅ አይደለም። በመጠይቁ ስም እንዳይገለጽ ለእያንዳንዱ ጥያቄ የምስጥር ቁጥር ተሰጥቷል።

መብት፡- የዚህ ጥናት ተሳታፊዎች ሙሉ በሙሉ ፈቃደኛ መሆን አለባቸው። በዚህ ጥናት ለመሳተፍም ሆነ ላለመሳተፍ መግለጽ ይችላሉ። ለመሳተፍ ከወሰኑ በማንኛውም ጊዜ ማቋረጥ ይችላሉ ይህ ደግሞ ጥናቱ ከምያስገኘው ጥቅም እርስዎን አያስቀርም። ለመመመለስ ፈቃደኛ ያልሆኑበትን ጥያቄ እንዲመልሱ አይገደደዱም።

የመገናኛ አድራሻ ፡ ማንኛውም ጥያቄ ወይም ሃሳብ በማንኛውም የጥናቱ ወቅት ስለጥናቱ ወይም ሂደቱ ካለዎት በሚከተሉት አድራሻዎች መግኘት ይችላሉ።

ዋና አጥኚ ፡ዘሪሁን በሪሶ ናና ፡ ኢሜይል; zerihunberiso@gmail.com

የእጅ ስልክ ፡ 0916100724

የስምምነት መግለጫ

ከዚህ በላይ የተገለፀውን የተሳታፊዎች መረጃ መስጫ እና የስምምነት መግለጫ ቅጽ አንብቢያለሁ/ተነበልኩ። የጥናቱን አላማ [የጥናቱ ቅጽም ተከተል እና ቆይታ] ጉዳትና ጠቀሜታ [ምስጥራዊነት] መብት [የመገናኛ አድራሻ ለአስፈላጊ ጥያቄዎች በሚገባ ተረድቻለሁ ። ያልገባኝን እንዲጠይቅ እድል ተሰጥቶኛል። በማንኛውም ጊዜ ማቋረጥ እንደምችልና ለመመመለስ ፈቃደኛ ያልሆኑበትን ጥያቄ መመለስ እንደሌለብኝ ተነግሮኛል። ስለዚህ በዚህ ጥናት ለመሳተፍ ፍቃደኛ መሆኔን በፊርማዬ አረጋግጣለሁ።

ማሳሰቢያ ፡- ይህ ቅፅ የሚሞላው በመረጃ ሰብሳቢው ፊት ለፊትነው። እባክዎ የተፈረመበትን የዚህን ቅፅ ኮፒ ለጥናቱ ተሳታፊ ይስጡ።

የተሳታፊው ፊርማ-----የመረጃሰብሳቢው ፊርማ-----

አመሰግናለሁ!!!!

ይህ መጠይቅ በደ/ብ/ብ/ህ/ክ/መ በአማር ወረዳ የማህበረሰብ አቀፍ የጤና መድሃኒት ተሳትፎ ተግዳሮቶች ምክንያቶች ምን እንደሆኑ መረጃ ለመሰብሰብ የተዘጋጀ ነው፡፡

ቀበሌ ----- የቤት ቁጥር-----

የተቆጣጣሪ ስም----- ፊርማ----- ቀን-----

ክፍል አንድ፡ መጠየቅ የሚደረግለት ማህበራዊና ስነ-ህዝባዊ ጥያቄዎች

ተ.ቁ	ጥያቄ	የመልስአማራጮች	ሚሰጥር ቁጥር	ዝላል
101	የመላሹ ዕድሜ	ዕድሜ -----		
102	የመላሹ መኖሪያ አካባቢ?	1. ከተማ 2. ገጠር		
103	የመላሹ ጾታ?	1. ወንድ 2. ሴት		
104	ብሔር?	1. ኮሬ 2. አማራ 3. ትግሬ 4. ኦሮሞ 5. ሌላ-----		
105	ሐይማኖት?	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ሌላ-----		
106	ያሁን የትዳር ሁኔታ?	1. ያገባ 2. ፈት 3. የተለያየ 4. ባልቴት 5. ያላገባ		
107	የቤተሰብ ቁጥር?	ቁጥር-----		
108	የትምህርት ደረጃ	1. መጻፍና ማንበብ አለመቻል 2. መጻፍና ማንበብ መቻል 3. የመጀመርያ ደረጃ 4. ሁለተኛ ደረጃ 5. ኮሌጅና ከዛብላይ		
109	የስራ ሁኔታ?	1. የቤት እመቤት 2. አርሶአደር 3. ነጋዴ 5. ሌላ-----		

ተ.ቁ	ጥያቄ	የመልስአማራጮች	ሚሰጥር ቁጥር	ዝላል
101	የመላሹ ዕድሜ	ዕድሜ -----		
102	የመላሹ መኖሪያ አካባቢ?	1. ከተማ 2. ገጠር		
103	የመላሹ ጾታ?	1. ወንድ 2. ሴት		
104	ብሔር?	1. ኮሬ 2. አማራ 3. ትግሬ 4. ኦሮሞ 5. ሌላ-----		
105	ሐይማኖት?	1. ኦርቶዶክስ		

		2. መስሊም 3. ፕሮቶስታንት 4.ሌላ _____		
106	ያሁን የትዳር ሁኔታ?	1. ያገባ 2. ፈት 3. የተለያየ 4. ባልቴት 5. ያላገባ		
107	የቤተሰብ ቁጥር? የት/ት/ደረጃዎ	ቁጥር-----		
108	የት/ት/ደረጃዎ ?	1. ማንበብና መጻፍ አልችልም 2. ማንበብና መጻፍ እችላለሁ 3. የመጀመሪያ ደረጃ 4. ሁለተኛ ደረጃ 5. ኮሌጅና በላይ		
109	የስራ ሁኔታ ?	1. የቤት እመቤት 2. አርሶአደር 3. ነጋዴ 5. ሌላ _____		

ክፍል ሁለት: የማህበረሰብ አቀፍ የጤና መድሃኒታዊ ጥያቄዎች

ተ.ቁ	ጥያቄዎች	የመልስ አማራጮች	ሚስጥር ቁጥር	ዝላል
201	ስለ ማህበረሰብ የጤና መድሃኒት ምትክ ውታውቃለህ?	1. አዎ 2. አይ		205
202	ስለ ማህበረሰብ የጤና መድሃኒት ክፍያ ውጭት?	1. ከጎረቤት/ጓደኛ 2. ከ ማህበረሰብ የጤና መድሃኒት ባለሙያዎች በስብሰባ ወቅት 3. ማህበረሰብ የጤና መድሃኒት ለቤት የግንዛቤ መፍጠር ዘመቻ ወቅት 4. መገናኛ ብዙሃን: ኢ.ቴ.ቪ, ሬድዮ 5. ከ ጤና ባለሙያዎች በህክምና አገልግሎት ወቅት 6. ሌላ _____		
203	የጤና አገልግሎት በ ማህበረሰብ የጤና መድሃኒት ንደምሽፈን ያውቃለሁ?	1. አዎ 2. አይ		
204	የትኞች የጤና አገልግሎቶች በ ማህበረሰብ የጤና መድሃኒት ንደምሽፈን ያውቃለሁ?	1. ተኝቶታካሚ 2. ተመላላሽ ታካሚ 3. ሁለቱም ተኝቶታካሚ እና ተመላላሽ ታካሚ 4. የውጭ ሀገር ሕክምና 5. ለውበት የሚደረግ የቀድሞ ሕክምና		
የማህበረሰብ አቀፍ የጤና መድሃኒት ግንዛቤ ጋር የተዛመዱ ጥያቄዎች				
205	የታመሙ ሰዎች ብቻ የ ማህበረሰብ አቀፍ የጤና መድሃኒት መግዛት አለባቸው?	1. ትክክል 2. ትክክል አይደለም 3. አላውቅም		
206	በ ማህበረሰብ አቀፍ የጤና መድሃኒት ድሚገንዘብ መክፈል ያለብዎቢሆንም ገንዘቡን መልሰው መቀበል እንዳለብዎ አያውቁም?	1. ትክክል 2. ትክክል አይደለም 3. አላውቅም		
207	በ ማህበረሰብ አቀፍ የጤና መድሃኒት	1. ትክክል		

	ሮገራም ለምሳሌ፡ ቁጠባ፣ የቁጠባወለ ድናየቁጠባገንዝብህመልሰውያንኛሉ?	2. ትክክል አይደለም 3. አላውቅም		
208	በማህበረሰብ አቀፍ የጤና መድሃኒት ለወደፊት የጤና አገልግሎት ለማግኘት ለማህበረሰብ የጤና መድሃኒት ገንዘብ ይከፍላሉ፡፡	1. ትክክል 2. ትክክል አይደለም 3. አላውቅም		
209	ሁሉም የጤና አገልግሎት ወጪዎች በማህበረሰብ አቀፍ የጤና መድሃኒት ይፈናል?	1. ትክክል 2. ትክክል አይደለም 3. አላውቅም		
210	ምንም እንኳን የወጪ ጥያቄ ለማህበረሰብ የጤና መድሃኒት ለቀረብ ክፍያ ክፍያ ይመለስልዎታል?	1. ትክክል 2. ትክክል አይደለም 3. አላውቅም		
211	የማህበረሰብ አቀፍ የጤና መድሃኒት ልነዎት (አዎ ከሆነ የአባልነት ካርድ ያሳዩ)	1. አዎ 2. አይ		219
212	አባል የሆኑ በትቀን	-----/-----/----- (ቀን/ወር/ዓመት)		
213	አባል የሆኑ በትምክንያት?	1. በሽታ /አደጋ በተደጋጋሚ በቤተሰብ ላይ በመከሰቱ 2. በቤተሰብ ውስጥ እርጉዝ ሴት የህክምና አገልግሎት ማግኘት ስላስፈለጋት 3. ልጆች በቤተሰብ ውስጥ የህክምና አገልግሎት ማግኘት ስላስፈለጋቸው 4. የህክምና አገልግሎት ወጪዎች ንገረኛ መሆን 5. ቤተሰብ የነጻ የሕክምና አገልግሎት ተጠቃሚ ስለሆነ 6. ቅድመ ክፍያ ከተጠቃሚዎች ክፍያ ጋር ስንጸጸር አንስተኛ በመሆኑ 7. በማህበረሰብ አቀፍ የጤና መድሃኒት ለመግዛት ያደረገው 8. ሌላ-----		
214	የአባልነት ዎንገር ድረ ስህያው ቃሉ?	1. አዎ 2. አይ		217
215	የአባልነት ዎንገር ድረ ማደሻ ምክንያት?	1. በሽታ/አደጋ በተደጋጋሚ በቤተሰብ ላይ በመከሰቱ 2. በቤተሰብ ውስጥ እርጉዝ ሴት የህክምና አገልግሎት ማግኘት ስላስፈለጋት 3. ልጆች በቤተሰብ ውስጥ የህክምና አገልግሎት ማግኘት ስላስፈለጋቸው 4. የህክምና አገልግሎት ወጪዎች ንገረኛ መሆን 5. ቅድመ ክፍያ ከተጠቃሚዎች ክፍያ ጋር ስንጸጸር አንስተኛ በመሆኑ 6. በማህበረሰብ አቀፍ የጤና መድሃኒት ለመግዛት ያደረገው 7. በማህበረሰብ አቀፍ የጤና መድሃኒት ለመግዛት ያደረገው 8. ሌላ-----		
216	የአባልነት ዎንገር ድረ ለማደስ ምክንያት?	1. በሽታ/አደጋ በተደጋጋሚ በቤተሰብ ላይ በመከሰቱ 2. ቅድመ ክፍያ ከአቅም በላይ ስለሆነ 3. ስለ የማህበረሰብ አቀፍ የጤና መድሃኒት አሰጣጥ ልቀት አለመኖሩ 4. የሚሰጠው የጤና አገልግሎት ጥራት ዝቅተኛ በመሆኑ 5. የሚሰጠው የጤና አገልግሎት የኛን ፍላጎት ስለማያሟላ 6. የማህበረሰብ አቀፍ የጤና መድሃኒት አስተዳደር ሠራተኞች ስለማይታወቁ		
217	ለማሳደስ አቅደዋል?	1. አዎ 2. አይ		
218	ለአባልነት መዋጮ ይከፍላሉ?	1. አዎ 2. አይ		

219	አባልደልሆኑበትምክኒያትምንድነው?	1.በሽታ/አደጋበተደጋጋሚበቤተሰብላይባለመከሰቱ 2.የመመዝገቢያእናክፍያውውድስለሆነ 3.ጠቀሜታውአስከሚረጋገጥለመጠበቅፈልጌ 4.ስለየማህበረሰብአቀፍየጤናመድህንነትአገልግሎትበጥልቀትአለማወቅ 5.በገንዘብእጥረት 6.የተወሰኑየጤናአገልግሎቶችበቻስለሚሰጡ 7.የሚሰጠውየጤናአገልግሎትጥራትዝቅተኛበመሆኑ 8.የማህበረሰብአቀፍየጤናመድህንነትዳደርሠራተኞችንስለማይታመኑ 9. ሌላ-----		
220	የአገልግሎትክፍያቆይታጊዜለቤተሰቤአመቺነው ?	1. እጅግበጣምአልስማማም 2. አልስማማም 3. ከሁለቱምአይደለሁም 4. እስማማኝሁ 5. እጅግበጣምእስማማለሁ		
221	የማህበረሰብአቀፍየጤናመድህንመመዝገቢያወጪከቤተሰቦቼአቅምበላይአይደለም ?	1. እጅግበጣምአልስማማም 2. አልስማማም 3. ከሁለቱምአይደለሁም 4. እስማማኝሁ 5. እጅግበጣምእስማማለሁ		
222	የማህበረሰብአቀፍየጤናመድህንየአገልግሎትክፍያከቤተሰቦቼአቅምበላይአይደለም?	1. እጅግበጣምአልስማማም 2. አልስማማም 3. ከሁለቱምአይደለሁም 4. እስማማኝሁ 5. እጅግበጣምእስማማለሁ		
223	የማህበረሰብአቀፍየጤናመድህንአስተዳደርሠራተኞችታማኞችናቸው?	1. እጅግበጣምአልስማማም 2. አልስማማም 3. ከሁለቱምአይደለሁም 4. እስማማኝሁ 5. እጅግበጣምእስማማለሁ		
224	የሌሎችማህበራዊማህበራትአባልነውያውቃለሁ?	1.አዎ 2.አይ		226
225	በየትኛውማህበራዊማህበርአባልነዎት?	1.ደቦ 2.እቁብ 3. እድር 4. ብድርናቁጠባ 5.በሐይማኖታዊማህበራት		
226	ቤተሰብዎየብድርእዳአለበት?	1.አዎ 2.አይ		
227	የብድርምንጭ	1.ባንክ 2.ከአነስተኛገንዘብተቋማት 3.ከገንዘብአበዳሪዎች 4.ዘመድ 5.ንደኛ/ጎረቤቶች 6.ሌሎች(የገለጹ)-----		
228	የብድርምክኒያት?	1.ለምርት 2.ለትምህርትክፍያ 3. ለሕክምናወጪ 4.ለሰርግ 5.ለበአወጪ 6.ለለቅሶስነስርአትወጪ 7.ለምግብ 8.ለንግድ		

ክፍልሶስት፡ጤናንየሚመለከቱጥያቂዎች

ተ.ቁ	ጥያቄዎች	የመልስአማራጮች	ሚሰጥርቁጠር	ዝለል
301	ባጠቃላይየዚህንቤተሰብየጤናሁኔታእንዴትይገልጹታል?	1. እጅግበጣምጥሩ 2. በጣምጥሩ 3. ጥሩ 4. ጥሩአይደለም 5. በጣምጥሩአይደለም		
302	የቤተሰብዎአባልሲታመምሕክምናከየትያንኛለው?	1.ከግልየጤናተቋም 2.ከመንግስትጤናጣቢያ 3. ከመንግስትሆስፒታል 4. ራስንበራስማከም 5. ከባሕልሀኪም		

		6. አቅራቢያዘመንገኙመድሐኒትመደብሮች		
30 3	ወደዚያየሚሄዱበትምክኒያት?	1. የጤናተቋሙቅርብስለሆነ 2.የጤናተቋሙውድባለመሆኑ 3.የጤናተቋሙበአጭርጊዜስለምያስተናግድ 4. የጤናአገልግሎቱፍቴንስለሆነ		
30 4	የዚህቤተሰብአባልበጠናታሞያውቃል?(ሕመሙከ30 ቀንበላይቆይቷል)	1.አዎ 2.አይ		
30 5	ባለፉት 3 ወራትየገጠመዎትየጤናችግርአለ ?	1.አዎ 2.አይ		312
30 6	በቅርቡሕክምናአስፈልገዎትነበር?	1.አዎ 2.አይ		
30 7	ሕክምናአግኝተዋል ?	1.አዎ 2.አይ		309
30 8	ሕክምናያላገኙበትምክኒያት?	1. የጤናተቋምእናቅስለሆነ 2.በቂገንዘብስለሌለኝ 3. ሕመሙበራሰብለምሻለኝ		
30 9	የሕክምናወጪየሚሸፈነው ?	1.በራስ 3.በነጻ 2.ማህበረሰቡ		
31 0	ለሕክምናምንያህልገንዘብያወጣለ?	ክፍያበብር		
31 1	የሕክምናውወጪውድነውብለውያስባለ?	1.አዎ 2.አይ		
31 2	የሚሰጠውየሕክምናአገልግሎትጥራትምንይመስላል?	1.በጣምዝቅተኛ 2. ዝቅተኛ 3.መካከለኛ 4.ከፍተኛ 5. በጣምከፍተኛ		
31 3	ከቤትወደአቅራቢያየጤናተቋምለመሄድምንያህልደቂቃዎችይወስድቦታል?	1. ጤናጣቢያ 2. ጤናኬላ 3. የመንግስትሆስፒታል 4. የግልክሊኒክ		
31 4	ርቀትበኪሎሜትር ?	1. ጤናጣቢያ 2. ጤናኬላ 3. የመንግስትሆስፒታል 4. የግልክሊኒክ		

ክፍል አራት፡ የቤተሰቡ ንጥል ስራ ላይ ለሚገኙት ሰው ጤናማ የሚሆኑ ጥያቄዎች

ከዚህ በታች የተዘረዘሩት ንግሶች ስለሚገኙዎት ?

የቁምነቶች	ቤተሰብ ወራት 12 ወራት የሚከተሉትን ነበረው		ሚለጥርቱት
	አይ(0)	አዎ(1)	
1. በሬዎች			
2. ላጥኞች			
3. የርብርብ ማወቅ			
4. ጥጃ			
5. በጎች			
6. የበግ ጠባቂ			
7. የጥበቃ ፎካል			
8. ፍላጎት			
9. ፈረስ			
10. አህያ			
11. ደረጃዎች			
12. በቅሎች			
13. አሳማዊ			
14. ጊደሮች			
15. ሌላ (ይገለጽ _____)			
የአርሽ መሣሪያ፣ የቤት ዕቃዎች ማሸፍኛ			
1. መኮት ኮቻ			
2. ማረሻ			
3. መደሻ			
4. ኮሪቻ			
5. ጋራ (በአንስሳት የሚገኙት)			
6. የሽመና ዕቃ			
7. ወፍጮ			
8. ማጭድ			
9. መክተፊያ/ቢላ			
10. አካፋ			
11. ዘመናዊ አልጋ			
12. ወንበሮች/አግዳሚ			
13. ፋኖስ			
14. ራዲዮ/ቴሌቪዥን (የሚሰራ)			
15. ኮምፒውተር/ላፕቶፕ			
16. ተንቀሳቃሽ ስልክ /ገመድ አልባ			
17. መሶብ /ስፊድ			
18. ካዊያ			
19. ቁምሳጥን			
20. የቆዳ ቦርሳ			
21. የቆዳ ሶፋ			
22. ቁርባን			
23. ጌጣጌጥ/ወርቅ/የእጅ ሰዓት			
24. ጠመንጃ			
25. ጎተራ			
26. የኩሼና ዕቃዎች			
27. በርሚል			
28. ጠረጴዛ			
29. መኪና (ዎች)			
30. ትራክተር			
31. ብስክሌት			
32. የውሃ ፓምፕ			
33. ሞተር ሳይክል			
34. ዘመናዊ ምድጃ			
35. ሌላ (ይገለጽ _____)			
36. ሌላ (ይገለጽ _____)			

አመሰግናለሁ !!!!!

Appendix C : Curriculum vitae (CV)

1. Personal information

√ Name: Zerihun Beriso Nana

√ Citizenship: Ethiopian

√ Sex: Male

√ Age: 37

√ Place of birth: Bule Hora ,Ethiopia

√ Date of birth: 02-Septembe -1983 G.C.

√ Marital status: Married

√ Health status: Relatively Healthy

√ **Contact address:**

➤ Phone: +2519 16100724

➤ Email: zerihunberiso@gmail.com

2. Educational Background

Educational Background	Name of school	Year from---to---
Elementary school	Bulehora	1983---1990 E.C
High school	Bulehora	1991---1994 E.C
Higher education	Jimma University	1995---1996 E.C
	Hawassa Health Science college	1999---2000 E.C
	Ethiopian Civil Service University	2005---2008 E.C

3. Qualification;

√ I had Diploma in pharmacy and Bachelor of Art Degree in PUBLIC FINANCIAL MANAGEMENT from **Ethiopian Civil Service University** with CGPA of 3.91 in 2008 E.C.

4. Language ability

Language	Listening	Reading	Speaking	Writing
Amharic	Excellent	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent	Excellent
Afan Oromo	Excellent	Excellent	Excellent	Excellent

5. Special skills

√ I did research project on the title: Assessment of Capital budget implementation in Amaro Woreda, SNNPR, Ethiopia, 2008.

√ Computer skills: I can perform micro soft word, micro soft Excel, using internet services.

6. Training experiences: I have successfully completed IPLS training and certified as Licensed Professional 2000. I successfully completed training on adult and pediatric ART and certified since 2002.

7. Work Experience: I have been working as logistic officer since 1996E.C for 9 years at Amaro Woreda health office and as gender officer from 2009 -2010.