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SCHOOL OF PUBLIC HEALTH

Willingness to contribute for Health Insurance scheme  
and its determinants among civil servants in Addis Ababa

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Willingness to contribute for Health Insurance scheme and its  
determinants among civil servants in Addis Ababa

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## Declaration

I, Eyerusalem Tesfaye Beyene, hereby declare that the thesis entitled **Willingness to contribute for Health Insurance scheme and its determinants among civil servants in Addis Ababa** is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

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## **Abbreviations and Acronyms**

AOR	Adjusted Odd Ratio
CBHI	Community Based Health Insurance
CI	Confidence Interval
COR	Crude Odd Ratio
EHIA	Ethiopian Health Insurance Agency
ETB	Ethiopian birr
GDP	Gross Domestic Product
IQR	Interquartile Range
LMIC	Low and Middle Income Country
Max	Maximum
Min	Minimum
MOH	Ministry of Health
NHE	National Health Expenditure
NHI	National Health Insurance
OOP	Out of pocket
SD	Standard Deviation
SHI	Social Health Insurance
SNNP	Southern Nations Nationalities and Peoples Region
SPSS	Statistical Package for Social Science
THE	Total Health Expenditure
UHC	Universal Health Coverage
US	United States
USD	United States Dollar
WHO	World Health Organization

## **Abstract**

**Background:** Ethiopia endorsed health care reforms to obtain resources, increase efficiency and promoting sustainability of health care financing. One of the components of the reform is to provide social health insurance for formal and community based health insurance for informal sectors. In the long run, the government plans to create strong risk pool and create equity in the health system by merging SHI and CBHI schemes.

**Objectives:** To assess willingness to contribute for community-based health insurance and factors affecting it among civil servants in Addis Ababa.

**Methods:** Institutional based Cross-sectional study was conducted in selected governmental organization in Addis Ababa. Total of 487 respondents who were selected using multi-stage sampling method were participated. The data was collected using structured self-administered questioner then entered and analyzed with SPSS version 21.0. A descriptive analysis was performed to describe the characteristics of participants. Chi-square test was used to test association between selected socio-demographic characteristics and awareness of health insurance scheme. Binary and then multiple logistic regressions were used to know the final predictors of willingness to contribute among the independent variables at P-value <0.05.

**Result:** Among 478 respondents, 115(24.1%) of them were willing to contribute for CBHI scheme. Those who are willing contribute 240ETB (8.3\$US) per annum. The finding revealed that gender, educational status, trust in health insurance agency, participation in traditional saving association and community solidarity significantly determine willingness to contribute for CBHI. The main reason for not willing to contribute for CBHI was found to be lack of enough income. From the study participants only 22.8% (109) of had good awareness about health insurance schemes.

**Conclusion:** This study finds the share of civil servants who are willingness to support CBHI scheme is low in Addis Ababa. Building trust on the scheme and enhance social solidarity are found to be important factor to influence willingness to for the scheme. Interventions to reduce poverty and expand educational coverage are also important issues to be considered in order to make civil servant to contribute to CBHI on volunteer basis.

**Key words:** civil servants, willingness to contribute, social solidarity, Ethiopia

# 1. Introduction

## 1.1. Background

Globally, calls to provide inclusive, equitable and quality health care for all at affordable cost – universal health care (UHC). Many low- and middle-income countries (LMICs) are experimenting with different forms of health financing reforms as part of broader strategies to achieve UHC. These include increased funding from taxation, national mandatory schemes or voluntary social health insurance schemes (1, 2).

Health financing via general taxation will not be easy, especially in low income developing countries, owing to a limited tax base and a low organizational capacity to enforce tax compliance or to avoid extensive tax evasion (3). Health financing policies across the world promote risk pooling mechanisms to protect people from this barrier to health care, often with special attention given to the poor. Yet the implication of such health financing mechanisms is the better off will be paying for services used by the poor. "Solidarity" is the term that is used to describe people's willingness to participate in these kinds of redistributive schemes (4).

The Council of Ministers of Ethiopia approved a comprehensive health care financing strategy in June 1998 to address such kind of resource constraints. In addition since 2008, to many related health financing reforms have been implemented, including: complementary health insurance strategy has been put in place providing overall guidance for expanding risk pooling in Ethiopia (5).

Universal health coverage designated reform was initiated as part of the Health Sector Transformation Plan. The country already has various policies and strategies aimed at improving access to a basic package of essential primary health care services and protecting users from catastrophic spending. Financial protection is of particular concern to the government of Ethiopia as shown by the various policy reforms, which is focused on bringing about universal health coverage (6).

Out-of-pocket (OOP) payment is usually the most regressive way to pay for health and the way that most expose people to catastrophic financial risks. Risk pooling is

the fundamental function of an insurance and provides for its economic sustainability as well as the sharing of individual risks associated with ill health across all the insured (7).

Ethiopia has taken significant steps towards the introduction and expansion of health insurance since 2010. The health insurance strategy includes Social Health Insurance (SHI) and Community-based Health Insurance (CBHI). Social Health Insurance is a mandatory health insurance program for employees of the formal sector, and is financed by earmarked payroll contributions from employees and employers. Community-based Health Insurance addresses the population employed in the rural and informal sectors Enrollment in pilot wards reached 48 percent in 2015(8) .

The formal and the informal sectors will be covered under separate health insurance schemes; ultimately, when the socio economic conditions are more favorable and public awareness is adequately enhanced, these separate schemes are expected to develop into a nation-wide health insurance scheme to ensure universal coverage (9).

The community-based health insurance program is at pilot phase but social health insurance is not implemented yet. The CBHI 13 pilot wards (woredas), each pilot scheme covers all the health service costs that accrue to it and there is no risk pooling among pilot schemes. As documented in other countries, CBHI can only be successful when there is risk pooling at regional and national levels. This is recommended by WHO and implemented in most countries like Rwanda. Regional and national risk pools should be established during scale up(10).

Overall, health insurance is strategy to achieve universal health coverage. Risk pooling is important function of health insurance to insure the very poor have access to health care service that include share of financial risk. Hence promoting risk pooling at national level enhances sustainability in health care financing. As many developing countries Ethiopia also launch health insurance schemes these are community-based and social health insurances.

## 1.2. Statement of problems

Even if the National health expenditure (NHE) increased from Birr 11.1 billion (US\$1.2 billion) in 2007/08 to over Birr 49.57 billion (US\$1.6 billion) in 2013/14 respectively, it still is not adequate to buy better health for all Ethiopians. Per capita NHE increased modestly, from US\$16.09 per capita in 2007/08 to US\$28.65 in 2013/14 (11). As noted above, it is by far much less than the US\$34 per capita recommended by WHO in 2001 and more recently updated by WHO; the update suggested that the 49 low-income countries including need to spend just less than US\$44 per capita in 2009, rising to a little more than US\$60 per capita by 2015(12).

The fifth national health account show in 2011/12 the total and per-capita OOP health spending was estimated to about 10.4billion ETB and 132ETB (7.49USD) per person respectively. The source of OOP health spending is mainly own cash saving, support from relatives and friends, and borrowing. Each of these funding seems to be used more often by the rich than poor (13). The spending also increased to 231 ETB in 2015/16 house hold survey. OOP spending is high and could be one of the major barriers to service utilization. Pre-payment mechanism is a health care financing strategy to overcome these constraints. However, the expansion of insurance schemes needs close follow up, and regular review of its implementation to ensure that the very poor have adequate protection(14).

The community-based Health insurance scheme enrolls informal sector community. Due to the low-income level of the population in the informal sector, it would be difficult to generate all the revenue required to cover all health care costs from the population alone(15). CBHI scheme also face risks associated to their smallness isolated CBHI schemes are vulnerable to liability of the small size of their risk pool and may not have the financial capacity to absorb catastrophic expenditure associated with either catastrophic illness of their beneficiaries and epidemics (16).

Ethiopian ministry of health has planned to merge community-based health insurance and social health insurance in to single scheme. Integration of the schemes with the same benefit package and level of provision would necessarily involve cross-subsidization, with the SHI – covering the wealthier formal sector – supporting the finances of the CBHI (17). It is principle of social solidarity in health care financing that is premised on cross-subsidies between the rich and poor, such that

finances flow from those who can, to those who cannot, afford healthcare (income cross-subsidies)(18, 19).

If the proposed NHI is to be implemented successfully, it is important that the general public understands the rationale for its development and supports the core principles underlying universal pre-payment health financing systems. There is also a great need for public engagement around what an NHI involves and about the rationale for fund pooling (20).

There is no published study has so far investigated the interest of civil servants' workers to show solidarity and support the poor in the informal sector if they are ask to do so. It is important to consider the extent to which the better off people is willing to support financially for health care insurance of others. Hence nothing is known about willingness of civil servants to contribute for CBHI and also factor affecting it.

### 1.3. Significant of the study

This study helps to give an insight about the interest of civil servants to support financially for those in the informal sector health care. It also generates an understanding about factors affecting civil servants' willingness to support health insurance of the others. This is useful for policy makers and implementers to identify how to enhance solidarity in health insurance. The study provides evidence on level awareness of civil servants. This is helpful for concerned body especially MOH and EHIA for strategic directions and planning purpose in expansion and scaling up of the health insurance.

## **2. Literature**

### **2.1. Health care financing strategy of Ethiopia**

In line with Ethiopia`s ambition to attain universal health coverage through primary health care, has set out ambitious goals for improving health status, financial risk protection and public satisfaction by investing on the health service delivery system to sustainably provide quality, equitable and affordable essential (or basic) health services for the realization of universal health coverage (21).

Five strategic objectives and corresponding strategic initiatives are identified in the Health Care Financing Strategy 2017 – 2025. The five strategic objectives of are: mobilize adequate resources, reduce out-of-pocket spending at the point of use, enhance efficiency and effectiveness, Strengthen public private partnership and capacity development for improved health care financing (21).

### **2.2. Key futures of Ethiopia health insurance**

#### **2.2.1. Social health insurance**

Social health insurance (SHI) scheme will cover formal sector employees. Employees, pensioners, and their families will benefit from the SHI scheme. The health service package to be provided to beneficiaries will include essential health services and other critical curative services from health facilities that have concluded contract with EHIA. Each member of SHI will contribute 3% of their monthly salary if the person is an employee of the formal sector or 1% of their pension if the beneficiary is a pensioner. For employees, the employer will contribute a matching 3% of the salary, and for pensioners, the government will contribute a matching 1% of the pension (22).

In 2015, government employees amounted to 1.9 million, the total number of pensioners was 303,000, the number of private sector employees was 1.9 million, and the number of dependents was 13 million. The total eligible population for SHI represents 19% of the population (while the eligible population for CBHI is 81% of the population(23).

### **2.2.2. Community based health insurance**

Community-based health insurance (CBHI) is designed to cover the population residing in the rural areas and engaged with informal sector activities. CBHI Scheme Since 2011, EHIA has been implementing CBHI pilots in 13 districts in collaboration with the regional governments of Amhara, Oromia, SNNP, and Tigray. The Agency has developed a Scaling-Up Strategy of CBHI and is now working with the four regional governments to expand CBHI to an additional 185 districts (10).

It is assumed that by end of 2020, 80% of informal sector households in 80% of woredas (wards) will be enrolled in the CBHI scheme, of which 10% will be considered the very poor whom the government will subsidize. The CBHI benefit package includes outpatient and inpatient services, laboratory services, imaging services, and supply of drugs and related services (with the exception of eyeglasses, dental implants, dialysis, and cosmetic procedures). Registration fees and premiums are set by region. From the pilot experiences, premiums range from ETB 126 to 180 per household per year (15, 16) .

### **2.3. Theoretical Review of Literature**

Much of the literature assumes that individuals are self-interested, that is, the welfare of others does not affect their own wellbeing (in economic terms, utilities are independent). A direct implication is that the willingness to contribute for the health care of the sick and poor is negatively related to current health status and wealth. In this view, people only approve of such redistribution if they will benefit from it themselves (24) .

Alesina and Farrara conclude that favoring of redistribution is related with current and expected wealth. The empirical study done in US found that individual supporting for redistribution is negatively affected by expected wealth (the greater probability of people become rich, the lower is their support for redistributive policy). Determinants of expected wealth include, among others, education, work experience, health status and the general economic outlook, as well as current income (25).

Some theories argue that an individual's own welfare is directly affected by the welfare of others. In this case, people will give more when the intrinsic benefits they derive from giving to improve other people's welfare exceeds the cost of that gift

explored this hypothesis in his analysis of the household, showing that wealthier individuals are more willing to give to others when compared to poorer individuals because their cost of giving is, relatively speaking, lower. Thus, wealthier individuals are predicted to give more towards the sick and poor (when sick), everything else being equal (26) .

Sociologists and anthropologists reach similar conclusions about the importance of gift to go along with different type of social relationship. There are different kinds of gifts one of them is money gift which bring social relationship. Hence, the willingness to give contributions to the sick and poor (when sick) may depend upon the kinds and strength of social relationships in which people are engaged. Empirical analyses of gift-giving highlight that gifts are given and received mostly from those social groups one interacts with the most (27).

Furthermore, when people have interactions with one another, they develop social and psychological relationships. Thus, as a result of experiencing interactions with the sick or the poor, individuals may have a variety of reactions that motivate support for redistribution. That is, people who spend time with sick and poor people may better empathies with them. Indeed, it has long been observed that empathy is closely related to past experience and familiarity by a number of psychologists and, further, to be an important explanation of observed altruistic behavior(28, 29).

The analysis done by WHO distinguishing which characteristics are associated with greater support for redistributive programs, suggest that it is important to note that individuals responding to a question regarding solidarity will also be influenced by their beliefs regarding the effectiveness of policies. People may be more supportive of redistributive policies when they have confidence in the institutions that would be responsible for implementation. Even if individuals preferred a high level of redistribution to the sick and poor in principle, they may still be unwilling to support such a policy if they do not trust the institution to be an effective implementer of this redistribution. This would be the case, for instance, if a government that is widely perceived as being corrupt would be the institution responsible for such redistribution(4).

The above explanation summarized by term social capital. The concept of social capital is described by different authors all referring to social connection or social

networks as an important element. (30). Putnam defines social capital as catalysts of cooperation and coordination that can achieve improve social and economic outcome Community members enhance their effectiveness in solving their common problem when they have interaction with one another (31).

#### **2.4. Empirical review of literature**

There are some empirical studies which made about willingness to contribute the health care of others around the world. The empirical analysis done in Ethiopia by WHO on preference for redistribution from all to the poor when sick found that health status and income have significant relation with redistribution of health care (4).

The study done in South Africa study among civil servant in 2011 found almost a third (28.6%) of civil servant said that they would be willing to contribute financially to 'health care that benefits a wider group of people'. which means; the rest 71.4 are not willing to contribute. The study also found Sex, educational level, working sector and salary grade had association with willingness to contribute financially to others, whereas insurance status, health status, recent illness and presence of chronic illness had no association (32).

Another study in same year among formal sector who were member of NHIF in Tanzania were 60% willing to contribute for CHF scheme. In this study perceived benefit, trust in CHF scheme and trust in scheme management were found factors influencing willingness to redistributive mechanisms (33).

In 2012 survey done among households in South Africa 75% of the respondent willingness to pay for themselves and immediate family or other people they knew whereas 11% said they would be willing to pay for a wider group of people who were badly off. Thirteen percent felt that everyone should pay for their own health care, and rejected the concept of cross-subsidies. Similar survey was done in Tanzania as South Africa; the respondents were asked whether they would be willing to contribute to the health insurance of the poor, to which 45% agreed. A greater proportion of those who agreed were men, in the middle quintiles, living in rural areas, with only primary education (34).

Endorsement of universal health coverage principles study in Burkina Faso found that respondents' willingness to accept UHC implementation at the national level influenced by appropriate management level. It also stated the rising of corruption in Burkina Faso perceived as an issue to be dealt with rather than one to be accepted with fatalism. The distrust expressed by respondents with respect to the central government and its local representatives shows how critical an adequate and trustworthy management of UHC funds would be to achieving real adherence (35).

Studies were done about awareness of formal sector about health insurance schemes in different African countries those launch national health insurance. Study done in South Western Nigeria found that 40% of respondents aware about the national health insurance scheme (NHIS) among 380 of them. From those who aware about the NHIS 153 (52.3%) of them were aware with TV, (37.9%) with billboard being major source of awareness (36) .

In Nigeria, Ilorin state study was conducted on awareness of national health insurance NHI among formal sector worker. This study found majority 292 (78.9%) of the respondent were aware of the NHI. Electronic media such as radio and television were the most cited source of information in 125 42.8% among those who were aware. Source such as friends, colleges and relatives were cited in 127 43.5%. Awareness of the NHIS was associated with education. Post-secondary education was significantly associated with awareness of the NHIS ( $\chi^2 = 42.112$ ,  $p < 0.000$ ); more singles compared to married were significantly aware about the scheme, ( $\chi^2 = 7.070$ ,  $p = 0.029$ ) while federal civil servants were significantly more aware of the scheme than were the state and the local government civil servants ( $\chi^2 = 24.019$ ,  $p = 0.000$ ). Age, sex, and employment status of respondents' spouses were not significantly associated with awareness of the NHIS (37).

The study done among civil servants in Ethiopia found that 257 (46.1%) of the respondents had good awareness and 231(41.5%) had poor awareness about health insurance (38). Other Study done among teachers found that level of awareness about the health insurance scheme, more than half 55.2% of the teachers in this study have never heard of the social health insurance scheme (39).

## 2.5. Conceptual frame work

The conceptual frame work is developed after referring different theoretical and empirical literatures. Willingness to contribute for community-based health insurance is affected by demographic characters, socioeconomic status, health status and social capital factors as reviewed above (24-35).

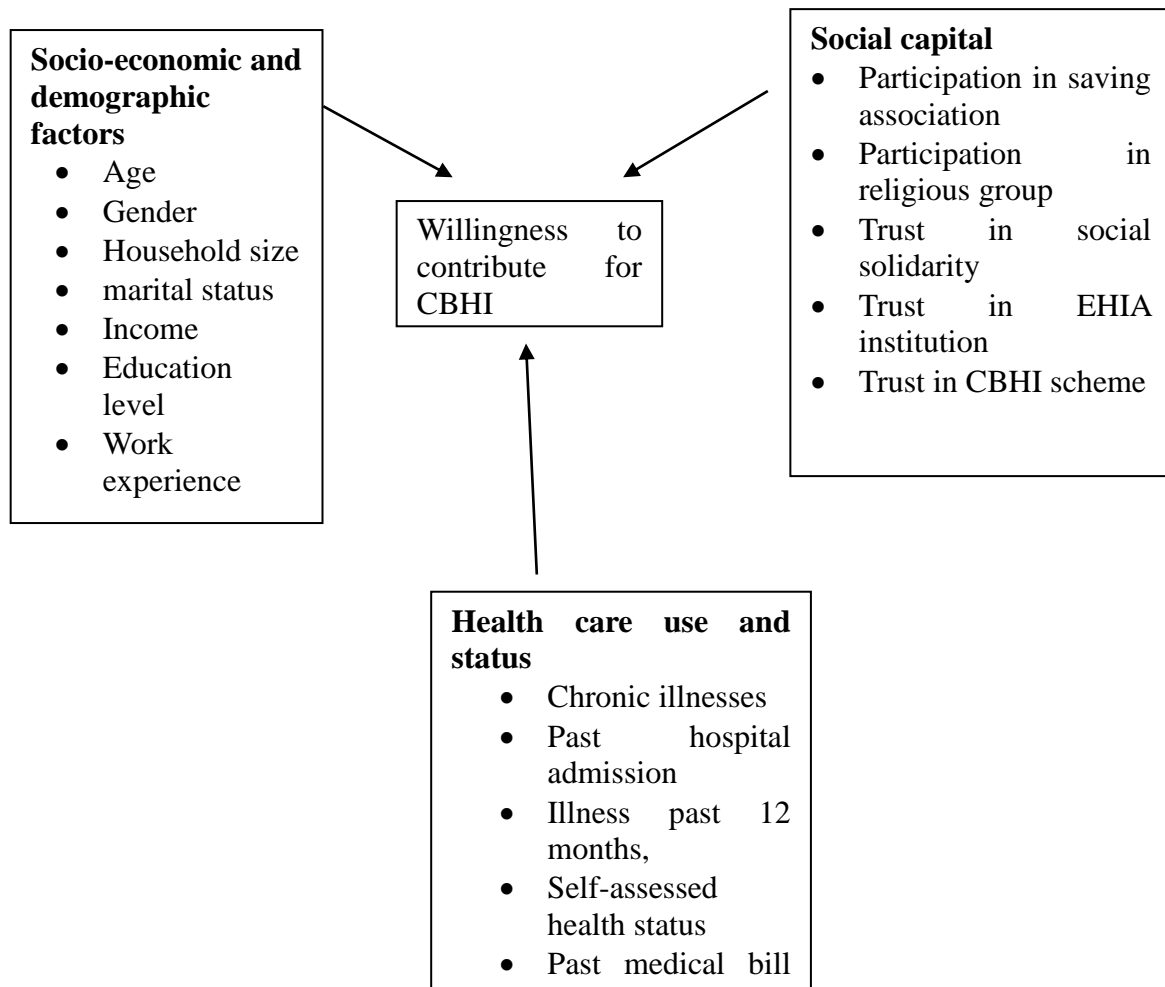


Figure 1 Willingness to contribute for CBHI conceptual frame Addis Ababa, Ethiopia, 2019

### **3. Objectives**

#### **3.1. General objective**

- To investigate willingness among civil servants to contribute for community-based health insurance scheme and its determinants in Addis Ababa between February and March, 2019

#### **3.2. Specific objectives**

- To examine level of awareness on health insurance schemes among civil servants in Addis Ababa.
- To assess willingness to support for community-based health insurance among civil servants in Addis Ababa.
- To identify factors associated with willingness to contribute for community health insurance among civil servants in Addis Ababa.

## 4. Method

### 4.1. Study design

Institutional based Cross-sectional study was used to assess civil servants' willingness to contribute for community-based health insurance scheme and its factor affecting interest to support the scheme.

### 4.2. Study area and period

The study was conducted among civil servants in Addis Ababa, which is the capital city of Ethiopia with the estimated total population of 5,706,000. Ethiopia has about 102 million population and its surface area 1,104.3 thousand square KM. (2016). Ethiopia is low income country, with GDP 80.56 billion (current \$USD) in 2016 and a per capita income of \$783(40).

Addis Ababa city has 107,142 civil servants from those 19,979 are teachers, 7146 are health professional and 14,167 are worker in administrative position. Addis Ababa city divided into 10 sub cities and 117 woredas. The city is one of the federal cities that are accountable to federal government of Ethiopia (41). The study was conducted between February and March, 2019 in Addis Ababa.

### 4.3. Source population

All civil servants who were worked in institutions under Addis Ababa city administration were source of population at the time of study.

### 4.4. Study population

Civil servants who were worked for randomly selected institutions during the study period.

### 4.5. Sample size

The sample size was calculated using single population proportion formula. P-value was taken from previous study proportion of willingness to contribute of civil servants for others which is, 29% at 95% confidence interval ( $Z= 1.96$ ), and margin of error ( $d=0.05$ ) (34).

$$\bullet \quad n = \frac{Z_{1-\frac{\alpha}{2}}^2}{d^2} p(1 - p) = \frac{1.96^2}{0.05^2} \times 0.29(0.71) = 316$$

Where: n= sample size

Z= Reliability coefficient for 95% confidence interval

p= proportion of population

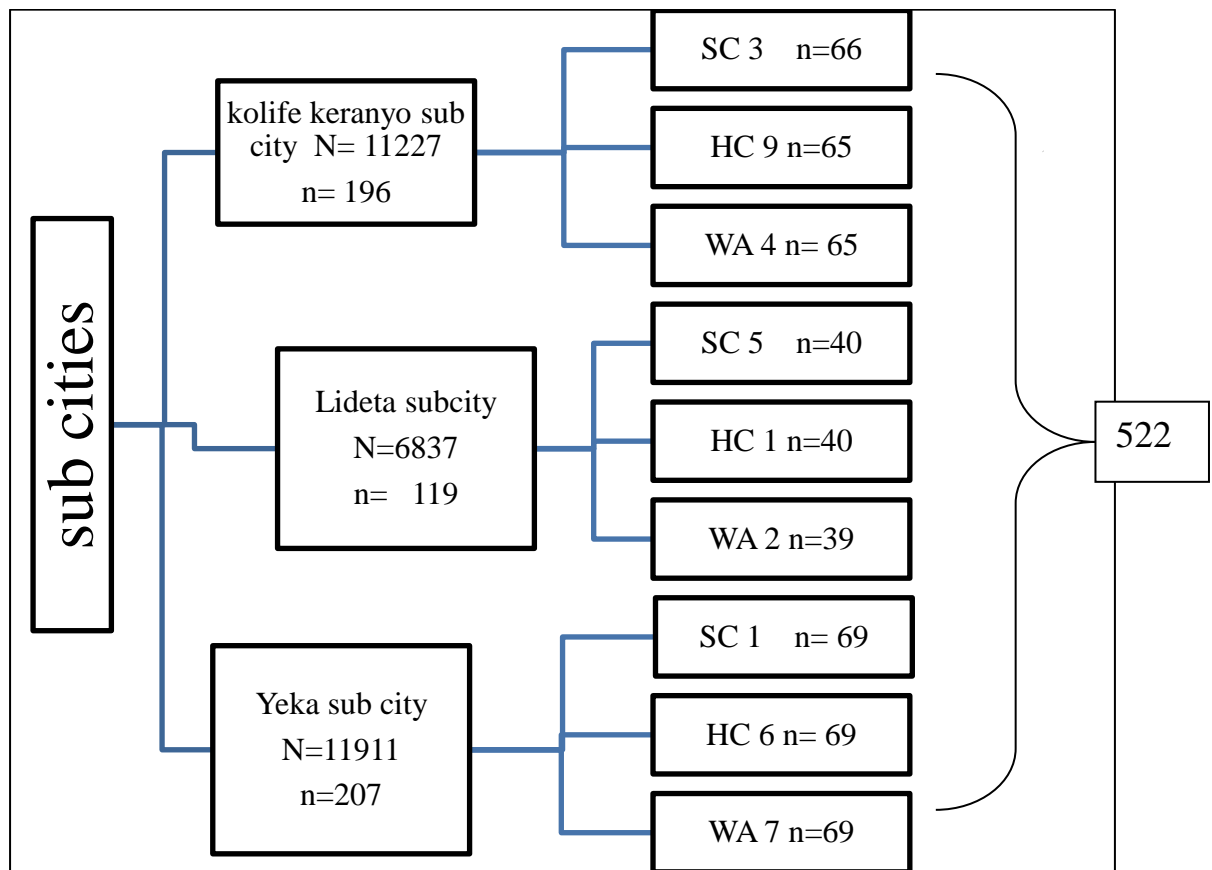
d= marginal error

A potential 10% non-response rate was add to sample size and then multiplied by 1.5 since sampling method was multi stage sampling. The final sample size was 522.

- $348 * 1.5 = \underline{\underline{522}}$

#### **4.6. Sampling procedures**

A multi-stage sampling technique was used to select participants. Since more than 80% of civil servant work under sub cities administration, the primary sampling units were sub cites. Out of ten sub cities; three were randomly selected. The sample size was allocated proportionally to each sub city. The institutions from each sub cities were stratified into Education institutions, health care institutions and administrative institution. The stratums include; schools, health centers and woreda (ward) administrative offices. The institutions were selected randomly from each stratum and then the sample size was equally allocated. The participant was selected by systematic random sampling from each institution by using attendance sheet as a sampling frame.



Where: SC= School

HC= Health center

WA= woreda administrative offices

Figure 2: Schematic presentation of sampling procedure for the study on willingness to contribute for health insurance scheme; Addis Ababa, Ethiopia, 2019

#### 4.7. Data collection instrument and procedure

The data was collected using structured self-administered questionnaire. The questionnaire divided into five sections. The first section involves socioeconomic and demographic questionnaires followed by the second section which is health status and health care use. The third section is about awareness on health insurance schemes question. The fourth one is social capital and the last section is willingness to contribute for CBHI questions. Presenting the scenario was important in this study since the respondents may have little or no idea about community-based health insurance schemes and its strategy. The scenario discloses health insurance strategy of ministry of health.

Six data collectors and two supervisors, who have bachelor degree, were recruited. Principal investigators gave two-day training for data collectors and supervisors on the objectives of the study and, how to approach respondents.

#### **4.8.Data quality control**

The developed questionnaire was adapted from similar studies (32, 38, 39) based on the objective of the study and the context of the study area. Questionnaire prepared in English and it translated into Amharic, and back translated into English to check for consistency. Questionnaire was also pretest on 21 civil servants. The pretest was done by interviewing participants in person using a structured questionnaire. Then, some correction was made accordingly.

Training of data collectors and supervisors was given for two days at just before data collection. Data collectors introduced themselves and the purpose of the study to the study participants before administering questioner. Collected data was checked for completeness and consistency by supervisor and principal investigator each day.

#### **Inclusion and exclusion criteria**

All civil servants who were worked for government institutions and give consent and selected by the sampling procedure of the study were included. Civil servants who were worked in contract base excluded.

#### **4.9.Variables of the study**

Dependent variable:-

- Willingness to contribute for CBHI (=1 if willing and zero otherwise)

Independent variables:

- Socio-economic and demographic: - (age, gender, religion, educational level, marital status, family size, working experience, working sector and income)
- Health status and health care use:- ( chronic illnesses, medical bill payment mechanism, past hospital admission, illness past 12 month, self-assessed health status)
- Social capital:- (Participation in saving association, Participation in religious group, Trust in social solidarity, Trust in the EHIA institution, Trust in role of CBHI scheme)

#### 4.10. Operational definition

**Premium /contribution:** is an amount of money paid to insurers on a regular basis, in return for coverage.

**Willingness to contribute:** is a respondents' will to support community based health insurance.

**Social solidarity:** the willingness of people to act in the interest of the other in need.

**Awareness on health insurance**— is measured by responses of 10 multiple choice questions. Those civil servants who score above the mean value to the questions asked about awareness of SHI were considered as having “good awareness”, else “poor

#### 4.11. Data Analysis procedure

A descriptive analysis was performed to describe the characteristics of the study participants. Chi-square test was used to test association between selected socio-demographic characteristics and awareness of health insurance scheme. Binary logistic regression was applied for all variables to find the independent predictors of willingness to contribute for CBHI. Multiple logistic regression was used to know the final predictors of willingness to contribute among the independent variables. A model assumption, nature of the variables, and recoding of the variables was checked before using analysis. Independent variables that had statistically significant association with the dependent variable ( $P > 0.05$ ) in the bivariate analysis was entered into the multivariate regression model.

##### Model specification

Willingness to contribute is dichotomous (binary) dependent variable. It takes if the respondent willing to contribute the value 1 otherwise 0. Logistic regression is transformed with natural logarithm to Logit Model. It uses to determine predictors of willingness to contribute. The logit function is specified as:

- $p(y) = \frac{e^{\beta_0 + \beta_1 x_1}}{1 + e^{\beta_0 + \beta_1 x_1}} \dots \dots \dots 1$
- $\text{logit}(p) = \ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 \dots \beta_i x_i \dots \dots \dots 2$
- $p(y) = \log(\beta_0 + \beta_1 x_1 + \beta_2 x_2 \dots \beta_i x_i) \dots \dots \dots 3$

Where:

- $p = \text{probability}$

- $y = \text{dichotomous dependent variable}$
- $\beta_0 = \text{constant}$
- $\beta_1 = \text{regression coefficient}$
- $x_1 = i^{\text{th}}$  independent variable

More specifically after review of the literatures for this study the above stated model can be written as follows to express probability of willingness to contribute for CBHI among civil servants.

- $$\Pr(\text{CBHI}) = \log(\beta_1 + \beta_2AG_i + \beta_3EDU_i + \beta_4MARS_i + \beta_5GEN_i + \beta_6EX_i + \beta_7HHsize + \beta_8INCOME_i + \beta_9CH_i + \beta_{10}SICK_i + \beta_{11}SHS_i + \beta_{12}PSA_i + \beta_{13}TI_i + \beta_{14}PRG_i + \beta_{15}TS_i + \beta_{16}TSS_i + \beta_{17}PA + \beta_{18}MEDBILL) \dots \dots \dots 4$$

**Table 1: Description of the explanatory variables of willingness to contribute for health insurance**

Variable	Description of the explanatory variables	category
<b>Demographic</b>		
Age (AGE)	age of respondent	Continuous
Gender (GEN)	Gender of the respondent	Dummy
Household size (HHSIZE)	employee house hold size	categorical
Marital status (MARS)	Marital status of the respondent	Categorical
<b>Socioeconomic</b>		
Income (INCOME)	monthly income of employee	Continuous
Education level (EDU)	highest level of education attained by employee	Categorical
Working	Working experience of respondents	Continuous

Experience(EX)		
<b>Health status and health expenditure</b>		
Chronic illness (CH)	Whether the respondent has chronic illness or not	Dummy
Past 12-month illness (SICK)	illness in past 12 month	Dummy
Past admission (PA)	hospital admission in past 12 month	Dummy
Past medical bill payment (MEDBILL)	Mechanism of how the respondent pay medical bill in the past	categorical
Self-assessed health status (SHS)	health status rated by the respondent	categorical
<b>Social capital</b>		
Participation in “Iqqub” saving association (PSA)	whether or not the respondent participate in any saving association	Dummy
Trust in HIA (TI)	whether respondent trust the current government health insurance agency	Dummy
Participation in religious group (PRG)	Whether respondent participate in religious group	Dummy
Trust in CBHI scheme (TS)	The respondent trust in the role of CBHI scheme to benefit the target people.	categorical
Trust in social solidarity (TSS)	The respondent’s trust the community to support for someone in need.	Dummy

#### **4.12. Ethical consideration**

Ethical clearance was obtained from Addis Ababa University College of Health Science, research and ethics committee of the school of public health. Supportive letters were obtained from Addis Ababa University, Addis Ababa health bureau and Addis Ababa education bureau. The letters were submitted to all concerned bodies to obtain their co-operation. Participants in this study had not any risk or harm and also any incentives. Information sheet was attached to each questioner which explains the purpose of study, confidentiality and respondent full right and to take and not to take part in the study. The data collection was started after verbal consent obtained.

#### **4.13. Dissemination of results**

The result will be disseminated to Ethiopia Health Insurance Agency, Ethiopia federal ministry of health, Addis Ababa regional health bureau and Addis Ababa University College of health science, school of public health.

## 5. Result

### 5.1.Socio demographic characteristics of study subject

A total of 487 of civil servants were included in the study, making response rate 91.57%. Half (242/50.4%) of the respondents were females and rest 235 (49.2%) were males. The distribution of respondents by age showed 229(47.9%) and 187 (39.1%) of the respondents were in the age group of 20-29 years and 30-39 years respectively. The mean age of respondents was 31 years ( $\pm 7SD$ ). The youngest respondent was 21 years old while the oldest was 58 years old.

Data on marital status reveals that 251 (52.5%) were single, follow by those who were married 211(44.1%). The rest 3.3% of the respondents were either divorced or widowed. Majority of the respondents (336/70.3%) were Orthodox Christian and 77(16.1%) were Protestant Christian. The rest of the respondents, 43(9%) and 22(4.6%) were Islam and other religions respectively. Regarding household size of participants 218 (45.6%) of the respondents come from house hold size of 2-4 and 135(28%) of them were from 5-7 house hold size. The mean house hold size of respondents was 4 people ( $\pm 2SD$ ) with minimum 1 and maximum 10 people. (Table 2)

**Table 2: Demographic characteristics of the study subjects, Addis Ababa, Ethiopia 2019 (N=478)**

Characteristics		Frequency	Percent (%)
Sex	Male	235	49.2
	Female	243	50.8
Age	20-29	229	47.9
	30-39	187	39.1
	40-49	54	11.3
	>50	8	1.7
Marital status	Single	251	52.5
	Married	211	44.1
	Divorced	5	1.0
	Widowed	11	2.3
Religion	orthodox Christian	336	70.3
	Islam	43	9.0
	protestant Christian	77	16.1
	catholic Christian	8	1.7
	Others	14	2.9
House hold size	1 person	91	19.0
	2-4 people	218	45.6
	5-7 people	135	28.2
	>7 people	34	7.1

More than half (298/62.0%) of the respondents have college or university bachelor degree or above and 124(25.9%) of them have Diploma. Most of them had working experience less than 10 years (365/76.4%). The median working experiences of the participants were 6 years with interquartile range of 7 years. Majority of the respondents' monthly salary were between 1400 and 5000 ETB (336/70.3%). Only 7.3% of the respondents had more than 7000 ETB monthly salary. Monthly mean (SD) salary was 4213(1830) ETB (Table 3).

**Table 3: Socioeconomic characteristics of the study subject, Addis Ababa Ethiopia 2019**

(N=478)

Characteristics		Frequency	Percent
Educational level	Primary school (1-8)	34	7.1
	secondary school (9-12)	23	4.8
	Diploma/level 2-4/	123	25.7
	Bachelor and above	298	62.3
Working Experience in year	≤1	37	7.7
	1.01-5	158	33.1
	5.01-10	170	35.6
	10.01-20	93	19.5
	>20	20	4.2
Monthly salary in ETB	900-1400	14	2.9
	1401-2350	64	13.4
	2351-3550	114	23.8
	3551-5000	158	33.1
	5001-7000	93	19.5
	>7000	35	7.3
Working sector	Educational	138	28.9
	Health care	167	34.9
	Woreda Administrative	173	36.2

Note: 1\$USD= 28.9 ETB

From the total of 478 respondents only 41(8.6%) had Additional income. Median (IQR) of monthly additional income of those respondents were 3000(2000) ETB (Table 4).

**Table 4: Descriptive statistics of additional income of the respondents, Addis Ababa Ethiopia 2019**

Monthly additional income (N=41)				
	Median	Interquartile range	Min	Max
Additional income per month	3000	(2000,5000)	1000	10000

**Note:** 1US\$=28.9ETB, Min=minimum, Max= maximum

## 5.2. Health and health related variables

From the study, 249 (52.1%) of respondents faced a history of illness within past twelve months. From those who had illness majority of them (71.5%) visited private health facility. (14.5%) were visited public health facility. Respondents who had chronic illness were account 55(11.5%). Among these, 14 of respondents had hypertension and 13 of them had diabetes mellitus. The others 25 (48%) had Asthma, Epilepsy and heart disease (Table 5).

Majority of respondents 307(85.1%) method of medical bill payment were out of pocket. Only 11(2.3%) of study subjects use health insurance. Others 40 (8.4%) of respondents were used free health care from the institution they had been working. Nearly half the respondents 223(46.7) reported their health status as very good and 165(34%) of them reported as good. six (1.3%) of the respondents reported their health status as poor (Table 5).

**Table 5: Health and health related situations of the study subject, Addis Ababa Ethiopia 2019**

Variables		Frequency	Percent (%)
Illness in past 12 month	Yes	249	52.1
	No	229	47.9
	<b>Total</b>	487	100
Treatment seeking place during illness	Private health facility	178	71.5
	Public health facility	36	14.5
	Religious place	14	5.6
	Drug vendor	4	1.6
	Others	17	6.8
Respondents with chronic illness	Yes	52	10.9
	No	426	89.1

	<b>Total</b>	478	100
Type of chronic illness (N=52)	Diabetes mellitus	14	26.9
	Hypertension	13	25
	Others*	25	48
	<b>Total</b>	52	100
Past 12 month hospital admission	Yes	40	8.4
	No	438	91.6
Method of medical bill payment	Out of pocket	407	85.1
	Health insurance	11	2.3
	Borrowed money	18	3.8
	Sold asset	2	.4
	Others**	40	8.4
	<b>Total</b>	478	100
Self-reported health status	Very good	223	46.7
	Good	165	34.5
	Medium	74	15.5
	Poor	6	1.3
	Don't know	10	2.1

**Note:** \* Asthma, epilepsy, heart disease.

### 5.3. Social capital of the respondents

More than half (324/67.8%) of the respondents participate in religious groups. Two third (64%) of the respondents were participate in “Iqqub” saving associations which is the most common traditional rotating saving and credit association in Ethiopia. Most of the respondents (286, 59.8%) had no trust in the health insurance agency. More than half of the respondents (264/55.2%) had trust in role of community based health insurance program to benefit the community. Two third (322/67.4%) of respondents have trust in their community solidarity. (Table 6)

**Table 6: Social capital of the study participants, Addis Ababa, Ethiopia 2019**

(N=478)

<b>Variables</b>		<b>Frequency</b>	<b>Percent (%)</b>
Participation in religious group	Yes	324	67.8
	No	154	32.2
Participation in “Iqqub” saving association	Yes	306	64.0
	No	172	36.0
Trust in social solidarity	Yes	322	67.4
	No	156	32.6
Trust in health insurance agency	Yes	192	40.2
	No	286	59.8

Trust in role of CBHI scheme	All most	264	55.2
	Some	45	9.4
	None	97	20.3
	Don't know	72	15.1

#### 5.4. Awareness about health insurance scheme

Majority of the respondents (383/80.1%) heard about CBHI scheme. The most common (285/58%) source of information of the study subjects was Television/radio. One hundred twelve (22.8%) of respondents source of information were fellow staffs. Those who aware SHI was planned for formal sector were 206 (43.1%) of respondents. From the study participants only 22.8% (109) of had good awareness and the rest 77.2% (369) had poor awareness about health insurance schemes.

**Table 7: Awareness about health insurance scheme among respondents in Addis Ababa, Ethiopia 2019.**

Variables	Category	Frequency	Percent
Ever heard about CBHI	Yes	383	80.1
	No	95	19.9
	Total	478	100
Source of information about CBHI*	Television/radio	285	58.0%
	Family	42	8.6%
	fellow staff	112	22.8%
	other source	52	10.6%
heard about SHI has planed	Yes	206	43.1%
	No	272	56.9%
	Total	478	100%
Awareness level about health insurance scheme	Good	109	22.8%
	Poor	369	77.2%

Note: \*multiple response questions

##### 5.4.1. Respondents Scio-demographic charactertics and awareness about health insurance scheme

Table 9 shows the association between certain socio-demographic characteristics of respondents and awareness about health insurance of schemes. Respondents' Working sector and working experience were significantly associated with awareness about

health schemes. Respondents who were worked in health care sector was significantly more aware about the scheme than educational and administrative sector ( $\chi^2 = 20.75$ ,  $df=2$ ,  $p < 0.000$ ). Those who have more than 5 years of working experience were more aware about health insurance ( $\chi^2=15.5$ ,  $df=4$ ,  $p<0.004$ ). Age, sex, marital status and educational level of respondents were not significantly associated with awareness about health insurance scheme.

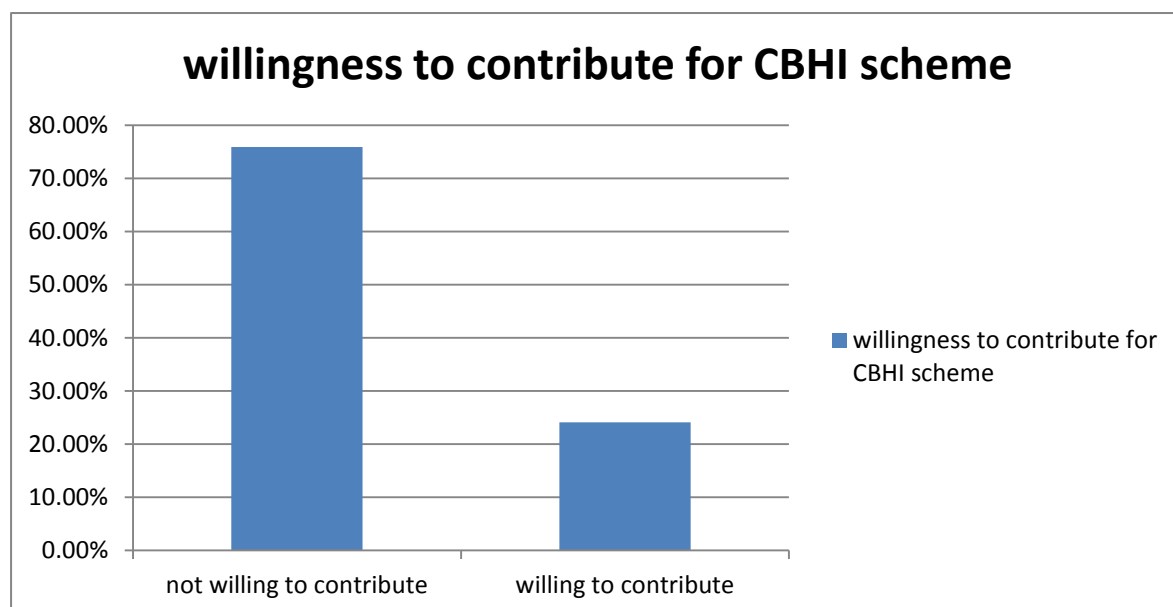
**Table 8: Awareness about health insurance scheme by characteristics of the respondent in Addis Ababa, Ethiopia 2019.**

<b>characteritics</b>	<b>Category</b>	<b>Poor awareness (%)</b>	<b>Good awareness (%)</b>	<b>X<sup>2</sup></b>	<b>Sig. (2-tail)</b>
<b>Sex</b>	Male	46.9	56.9	0.67	.567
	Female	53.1	43.1		
<b>Age</b>	20-29	45.8	55	5.255	.154
	30-39	40.9	33		
	40-49	11.1	11.1		
	>50	2.2	0.9		
<b>Marital status</b>	Single	52.3	53.2	2.028	.567
	Married	44.2	44		
	Divorced	0.8	1.8		
	Widowed	2.7	0.9		
<b>Educational level</b>	Primary school (1-8)	8.7	1.8	6.627	.085
	secondary school (9-12)	5.1	3.7		
	Diploma/level 2-4/	24.9	28.4		
	Bachelor and above	60.2	66.1		
<b>Working sector</b>	Educational	31.2	21.1	20.75	.000
	Health care	29.5	53.2		
	Woreda Administrative	39.3	25.7		

<b>Working Experience in year</b>	≤1	8.7	4.6	15.477	.004
	1.01-5	33.3	27.1		
	5.01-10	33.1	44		
	10.01-20	22	16		
	>20	3	8.3		

### 5.5. Willingness to contribute for CBHI scheme

Out of 478 civil servants from nine different institutions, 115(24.1%) of them were willing to contribute for CBHI scheme the rest 363(75.9%) were not willing.



**Figure 3: Willingness to contribute for CBHI scheme among the study participants Addis Ababa, Ethiopia 2019 (N=478)**

This study also assessed how much the study participants are willing to pay given that they are willing to contribute. The median amount of money 115 respondents willing to support CBHI scheme were 240 ETB (IQR=300ETB) per annum (8.3US\$). The minimum and maximum amount respondents willing to support were 60 and 1200 ETB per annum respectively.

**Table 9: Amount of money the respondents willing to contribute per annum Addis Ababa, Ethiopia 2019 (N=115)**

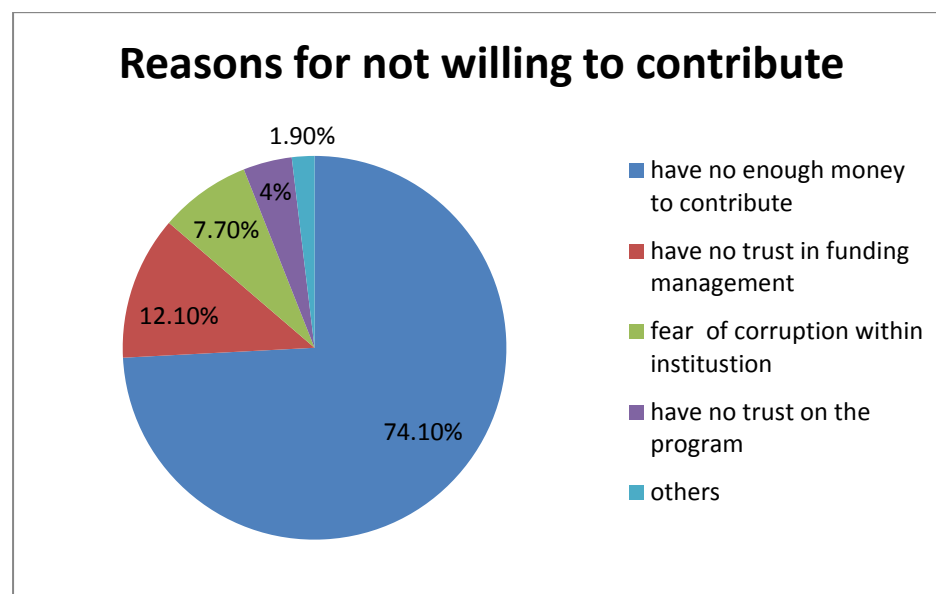
Variable	Mean	Median	SD	IQR	Min	Max
Amount money willing to contribute (ETB)	331	240	305	(120,420)	60	1200
<b>Amount of money willing to contribute by working sector (ETB)</b>						
Educational	528	180	492	-	60	1200
Health care	252	240	144	-	96	600
Administrative	288	180	192	-	96	600

Note: 1US\$=28.9ETB

### 5.5.1. Reasons for not willing to contribute for CBHI

The first most common reason of respondents (269/74.1%) for not willing to contribute were had no enough money to contribute. The second and third reasons were had no trust in funding management and fear of corruption these were 44(12.1%) and 28 (7.7%) respectively. Fifteen (4.1%) respondents reason were CBHI was not useful program. (Figure 4)

**Figure 4: Reasons for not willing to contribute for CBHI Addis Ababa, Ethiopia 2019 N=365**



## 5.6. Factors affecting willingness to contribute for CBHI scheme

Ten variables (gender, marital status, education status, having additional income, illness in past 12 month, participation in “Iqqub” saving and religious group, trust in community solidarity, trust in health insurance agency, and trust in CBHI scheme.) that were significantly associated ( $p < 0.05$ ) with willingness to contribute for CBHI scheme at the bi-variable analysis were entered into the multivariate model. The final predictors of willingness to contribute for CBHI were sex, educational status, and participation in “Iqqub” saving association, trust in community solidarity, trust in health insurance agency, and trust in CBHI scheme.

Gender was found significantly associated with willingness to contribute for CBHI scheme. Female were 43% less likely to contribute than male (95% CI of AOR: 0.208 (.099, .438)). This study also reveals Educational level also had significant association with willingness to contribute for CBHI. Those who attend primary education were less likely willing to contribute than those who had Bachelor degree and above (AOR=.075, CI: .009, 0.604).

In case of social capital variables participation in “Iqqub” saving association, trust in community solidarity, trust in health insurance agency, and trust in the CBHI scheme had statistically significant in multivariate analysis. Those who participate in traditional saving were 2.2 times more likely willing to contribute CBHI (AOR=2.18 CI: 1.117, 4.27). Those who had trust in their community solidarity were 2 times more likely to contribute for CBHI scheme than those who hadn't (95% CI of AOR: 1.14, 4.26). Trust in health insurance agency was strong predictor of willing to contribute for CBHI scheme (AOR=3.57, 95% CI of AOR: 1.95, 6.88).

**Table 10: Binary and multiple logistic regressions of factors associated with willingness to contribute for CBHI scheme.**

Variables	Willing to contribute for CBHI (n=115)	COR	Adjusted OR (95% CI)	Sig.
<b>Gender</b>				
Female	46	.562	.208 (.099,.438)	.000
Male*	69			
<b>Marital status</b>				
Single*	52			
Married	57	1.42	1.78 (.98, 3.235)	.059

Divorced	4	15.31	2.2 (0.17, 28.55)	.545
Widowed	2	.850	.86 9.107, 6.89)	.887
<b>Education level</b>				
Primary school (1-8)	1	.099	.075 (.009, .604)	.015
secondary school (9-12)	7	1.425	1.679 (.492, 5.736)	.408
Diploma/level 2-4/ Bachelor and above*	37 70	1.401	2.476 (1.13, 5.41)	.023
<b>Have additional income</b>				
Yes	26	6.778	2.37(0.959, 5.875)	.062
No*	89			
<b>Illness in past 12 month</b>				
Yes	74	1.939	1.566 (.878, 2.79)	.129
No*	41			
<b>Participation in "Iqqub" saving association</b>				
Yes	90	2.450	2.18 (1.117, 4.27)	.022
No*	25			
<b>Participation in religious group</b>				
Yes	88	1.754	1.18 (.618, 2.25)	.619
No*	27			
<b>Trust in social solidarity</b>				
Yes	96	3.063	2.04 (1.14, 4.26)	.019
No*	19			
<b>Trust in health insurance agency</b>				
Yes	86	7.190	3.67 (1.95, 6.88)	.000
No*	29			
<b>Trust in CBHI scheme</b>				
Almost*	105			
Some	4	.148	.393 (.121, 1.27)	.119
None	2	.032	.024 (.005, .115)	.000
Don't know	4	.089	.305 (.099, .942)	.039

-2 Log likelihood = 334.6

Pseudo R<sup>2</sup> (Cox & Snell R<sup>2</sup> = 0.333, Nagelkerke R<sup>2</sup> = 0.5)

#### Hosmer and Lemeshow Test

Chi-square	df.	Sig.
3.809	8	0.874

Note: \*reference categories, COR: crude odds ratio, AOR: adjusted odds ratio

The model summary in regression analysis gives two pseudo  $R^2$  value. From the value we can conclude that 33.3% to 50% of variance in the dependent variable explained by the model. From the H-L statistics which used to test goodness of fit has p-value 0.87. This statistically insignificant value ( $<0.05$ ) indicate the model adequately fit the data.

## 6. Discussion

Since majority of Ethiopians are living in rural area and employed in informal sector, CBHI is major scheme to use. The affordability of premium is challenging because part of the community are poor. To overcome this problem like Rwanda most developing countries link CBHI and formal health financing mechanism (16). This mechanism promotes solidarity and include to cross-subsidization on among different socioeconomic status with large contribution from those who are better off financially (9). This cross sectional study aims to examine the interest of civil servants to support CBHI scheme.

This study reveals that only 24.1% of civil servants in Addis Ababa were willing to contribute for member of CBHI scheme which enroll informal sector communities. This is nearly similar result 28.6% with South Africa study(32). But this result is different from study done in Tanzania which is 60% of national health insurance fund (NHIF) households expressed their willingness to contribute for community health insurance (CHF) scheme (33). This difference may be due to level of enrolment at the time of study. The coverage of CHF and NHIF schemes were about 6.6% and 7.2% of population respectively. Hence, the health insurance exposure could build trust between community and provider that can enhance solidarity.

This study identified various factors that affect interest of formal sector to support CBHI scheme. Females were found less willing to contribute, as were those with only primary Education. This is similar finding with the house hold survey done in Tanzania(34); men were more willing to contribute for the poor. This may be due to income difference between the two genders. Civil servants with primary education were also less willing to contribute than those who had Bachelor Degree. This finding is concurrent with study done in South Africa (32). The difference in income and awareness about health insurance between those who attend primary school only and higher education could influence the support to health insurance of others.

This study also found that having additional income positively related with willingness to contribute. This finding is in keeping with Beckers' (25) theory, argue that wealthier individual are more willing to give others when compare to poor

individual. People will give more when the intrinsic benefits they derive from giving to improve other people's welfare. The benefit could be reciprocal benefit or psychic.

Community members enhance their effectiveness in solving their common problem when they have interaction with one another (31). This theoretical argument keeps with the finding; trust in community solidarity, participation in religious groups and *Iqqub* saving association (rotating saving and credit association) have positively relation with willingness to contribute. The willingness to contribute may depend upon the strength of social relationship in which people are engaged. Also social networks enhance reciprocity trust in community that brings solidarity. In addition to this participating in ROSCAs has financial (economic) importance for the individuals that enable them to supporting others.

Trust in the health insurance agency strongly affects the willingness to support the scheme. People are more supportive such redistributive policy when they have confidence in the institution that would be responsible for implementation. Even if individuals preferred a high level of redistribution to the sick and poor in principle, they may still be unwilling to support such a policy if they do not trust the institution to be an effective implementer of this redistribution. This would be the case, for instance, if a government that is widely perceived as being corrupt would be the institution responsible for such redistribution (4). Study in Burkina Faso the distrust expressed by respondents with respect to the central government and its local representatives shows how critical an adequate and trustworthy management of UHC funds would be to achieving universal health coverage (35). In addition to this individuals would be more willing to contribute when they feel the program benefit the targeted group. The respondents those who had trust in CBHI scheme were more willing to contribute than those who had not.

The most common reason given by respondents for not being willing to contribute was not having enough money. Even if they want to support the scheme financially, not having enough money could be barrier. The other reasons were; had no trust in funding management, fear of corruption, and had no trust in role of CBHI program. Similarly trust in scheme management has been cited important factor influencing acceptance of redistribution in Tanzania study. It influence whether or not individuals

feel that their contribution will indeed be put to intended use (33). The other reasons support finding in multivariate regression analysis.

Age, household size, working experience, chronic illness, health status and household size have no significant association with willingness to contribute for CBHI in this study. This finding is consistent with South Africa study; found that insignificant relation between, chronic illness, health status and willingness to cross subsidize to wider group (32).

Four fifth of respondents were heard about CBHI scheme from different sources. This is high when it compare with those who were heard that SHI has planned for formal sector which is 43.1%. This is nearly equal compared to study in which 44.8% were aware about SHI in Wolita Sodo, Ethiopia (39). But it is higher compared to South Western Nigeria study (40%). This may be due to time difference the two studies conducted. Electronic media (TV/radio) most cited source of information, 58%. This is higher when compared to Illorin state, Nigeria 42.8% (37). Awareness creation session and printed media were cited by 10% of respondents.

Civil servants were perceived to have higher level awareness of health insurance, since they are educated and have close relation with government programs. This study found only 22.8% of has good awareness about health insurance schemes which is low figure. In this study awareness of health insurance scheme is associates with some socioeconomic characteristics. Those are working sector and work experience. Those who were worked in health sector were significantly more aware than educational and administrative sectors. The study done in Nigeria also found working place were significantly associated with awareness in prepayment scheme (37). This may be due to civil servants in health sector has opportunity to get information on health related programs. Working experience also significantly associated with awareness.

## **7. Strength and Limitation of the study**

### **Strength**

- The study used primary data.
- Probability sampling method was used to select the study participants.
- This is the first study to examine the willingness of civil servant to support CBHI which provide health care services for those in the informal sector.

### **Limitation**

- The study did not discuss well due to lack of literature which fits with the study
- Civil servants, who were worked for federal governments, were not included in study due to time and cost constraints.

## **8. Conclusion**

This study find the willingness to contribute for CBHI scheme among civil servants is very low in Addis Ababa. Those who are willing, want to contribute two hundred forty ETB (8.3\$US) per annum. The amount of contribution is almost all of premium that currently CBHI member are contributing per household.

Gender, educational status, participation in traditional saving association, social solidarity showed a significant association with outcome variable willingness to contribute for CBHI scheme. Trust in the role of CBHI scheme and trust in health insurance agency also strongly affect willingness to contribute. The most common reason given by respondents for not being willing to contribute was not having enough money. The other reasons were; had no trust in funding management, fear of corruption, and had no trust in CBHI program.

Awareness of civil servants about health insurance schemes is low. The statistical analysis shows that civil servant's awareness of health insurance has significant relationship with working sector and working experience.

## 9. Recommendation

Based on the evidence, the study recommends the following issues to be given attention by concerned body so as to enhance awareness of health insurance and willingness to contribute for CBHI among civil servants.

- **To policy makers**
  - Tackle corruption and distrust in governance prior to implementing nationwide national health insurance.
  - Following community participation approach in order to make development interventions effective.
  - Following multi-dimensional intervention to reduce poverty and expand educational coverage so as to create sustainable health insurance scheme
- **To health insurance agency**
  - Improve transparency and accountability in management of the scheme to build trust.
  - Organize awareness creation programs about the health insurance schemes (CBHI and SHI) and its principle among civil servants.
  - Create and nurture a positive image of health insurance schemes within civil servants
- **To researchers**
  - Triangulating the factors affecting willingness to support CBHI scheme from qualitative method will provide more information.

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## **ANNEXES**

### **Annex I. English version of information sheet**

Title of the Research Project: Willingness to contribute for Health Insurance scheme and its determinants among civil servants in Addis Ababa, Ethiopia.

Name of Principal Investigator: Eyerusalem Tesfaye (Bsc in Public Health)

Name of the Organization: Addis Ababa University College Health Sciences, School of Public Health

**Introduction:** Information sheet prepared for the study on willingness of civil servants to contribute for health insurance scheme. This information sheet is prepared with the aim of explaining the research project that you are asked to join by the group of research investigators. The main aim of the research project is to assess interest of civil servants to support the CBHI. The investigator team includes data collectors, and supervisors. We also include senior advisor from Addis Ababa University (Dr. Anagaw Derseh)

**Purpose of the Research Project:** majority of Ethiopians are living in rural area and employed in informal sector, CBHI is major scheme to use. The affordability of premium is challenging because part of the community are poor.

Despite the intensive problem there is no similar study in the study area done, and then the result of this study greatly will generate baseline information to formulating and designing appropriate and integrated sustainable health insurance scheme.

**Procedure:** In order to assess willingness to contribute for CBHI and its determinants among civil servants: cross sectional study in Addis Ababa, Ethiopia is being conducted. We invite you to take part in our project. If you are willing to participate in our project, you need to understand and sign the consent form. Then you will be requested to give your response by the data collectors through administered questionnaire. For this questionnaire-based study all civil servants, who are coming in the study period and selected by systematic sampling technique will be involved.

**Risk and /or Discomfort:** By participating in this research project you may feel that it has some discomfort especially on wasting your time (20 minutes). There is no potential risk in participating in this research project.

**Benefits:** If you are participating in this research project, there may not be direct benefit to you but your participation is likely to help us in looking the interest of civil servants to support the people in CBHI scheme and factor affecting it.

**Incentives/Payments for Participating:** You will not be provided any incentives or payment to take part in this project.

**Confidentiality:** All the response given by participants and the result obtained will be kept confidential and all records will be kept in a locked cabinet. The data collected from this research project will kept confidential and information about you that will be collected by this study will be stored in a file, without your name, but a code number assigned to it. Which number belong to which will be locked with key, and it will not be revealed to anyone except the principal investigator.

**Right to Refusal or Withdraw:** You have full right to refuse from participating in this research. You can choose not to response some or all the questions. You have also the full right to withdraw from this study at any time you wish, without losing any of your right.

**Person to contact:** This research project is reviewed and approved by Addis Ababa University school of Medicine Institutional Review Board. If you want to know more information you can contact the Board through the address below. If you want to ask questions for clarification about the study later on, you can contact Mss.Eyerusalem Tesfaye the principal investigator by cell phone number 0923294543 during the working hours in the week days. Email: Jerrytes2009.et@gmail.com

## ANNEX II. English version Informed consent

The above information regarding my participation in the study is clear to me. I have been given chance to asked question and my questions have been answered to my satisfaction. My Participation in this study is entirely voluntarily. I understand that my records will keep private and that i can leave the study at any time.

Respondent agree to participate.

- Yes
- No

Date : \_\_\_\_\_ .

Questionnaire administrator: Name : \_\_\_\_\_

Sign: \_\_\_\_\_

Questionnaire ID number: \_\_\_\_\_

1. Result of Questionnaire:
2. Completed
3. Respondent not available
4. Refused
5. Partially Completed

Assured by supervisor: Name: \_\_\_\_\_

Signature: \_\_\_\_\_

**ANNEX III.** English version questionnaire

**Section 1. Socio-economic and demographic characteristics questions**

	Question and filter	Possible answers and coding	Skip
111	Gender	1. male 2. female	
112	Age	year	
113	What is your religion?	1. Orthodox Christian 2. Islam 3. Protestant Christian 4. Catholic Christian 5. Other (specify) _____	
114	What is your current Marital Status?	1. Never Married 2. Married 3. Divorced 4. Widowed	
115	What is the highest level of education you have attained?	1. primary school 2. secondary school 3. Diploma 4. Degree and above	
116	working experience	_____. month _____. years	
118	In which institution are you working in?	1. Educational 2. Health center 3. Woreda administrative	

119	How much is your current salary (per month)?	_____ .ETB	
120	Do you have any other alternative source of income other than the organization wage?	1. Yes 2. No	If no skip Q no. 117
121	If your answer is yes to Q no 116, how much is your average monthly income from the other source.	.ETB	

## Section 2. Health status and health care use

	Question and filter	Possible answers and coding	Skip
201	Have you fallen sick in the last 12 months?	1. YES 2. NO	
202	Where did you go first to seek treatment? multiple response is possible/	1. Public health facility 2. Private health facility 3. Religious place 4. Treated at home 5. other (specify)	
203	Do have any chronic disease?	1. Yes 2. No	If no skip Q no 121
204	What type of chronic disease do you have?	1. Diabetes Maltese 2. Hypertension 3. Epilepsy 4. others.(specify)	
205	Have you ever admitted to hospital past 12 months?	1. Yes 2. No	If no skip to
206	How long have you been admitted to hospital?	1. A Week and less 2. More than a weeks	

207	How do you rate your health status?	<ol style="list-style-type: none"> <li>1. Excellent</li> <li>2. Good</li> <li>3. Average</li> <li>4. Poor</li> <li>5. Don't know</li> </ol>	
208	How did you pay for your medical bill?	<ol style="list-style-type: none"> <li>1. Own money (out of pocket)</li> <li>2. Borrowed money</li> <li>3. Sold asset</li> <li>4. Insurance</li> <li>5. Other</li> </ol>	

### Section 3. Awareness on health insurance schemes questions

	Question and filter	Possible answers and coding	Skip
301	Where do you think health care funds come from? /multiple response is possible/	<ol style="list-style-type: none"> <li>1. Personal(out of pocket)</li> <li>2. Regular government budget</li> <li>3. Government HIA</li> <li>4. Private health insurance</li> <li>5. Employers</li> <li>6. International funding agencies</li> <li>7. I don't know</li> </ol>	
302	Do you know what health insurance is?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>	
303	If yes for Q 302, what are the objectives of health insurance? / multiple response is possible/	<ol style="list-style-type: none"> <li>1. Improve access to health care by reducing OOP spending</li> <li>2. Remove/reduce substantial Financial burdens of households during illness</li> <li>3. Improves quality of care by increasing resources for health</li> </ol>	

		care facilities 4. Enhancing accountability 5. Mobilizing additional resources for health sectors through a collection of contributions/premium.	
304	If your answer is yes for Q 302, please mention types/methods of health insurance. /multiple response is possible/	1. Private for-profit health insurance 2. Private for non-profit health insurance 3. Community based health insurance 4. Social health insurance	
305	Have you ever heard about community-based health insurance?	1. Yes 2. No	If no skip Q no 305
306	What is your source of information for question number 304?	1. Television 2. Radio 3. family 4. Fellow staff 5. others( specify)	
307	For which sector is community-based health insurance introduced?	1. Formal sector 2. Informal sector	
308	Do you know the presence of health services which are not covered by community based health insurance services?	1. Yes 2. No	
309	Can CBHI help to cover Outpatient services?	1. Yes 2. No	
310	Have you heard that the government has planned to begin the social health insurance scheme for civil servants in the near future?	1. Yes 2. No	

#### Section 4. Social capital

	Question and filter	Possible answers and coding	Skip
401	Do you participate in 'Iqqub' saving association?	1. Yes 2. No	
402	Do you participate in any religious group?	1. Yes 2. No	
403	Most of the people in your community help others when they are in need.	1. Yes 2. No	
404	Do you trust the current government health insurance provider agency	1. Yes 2. No	
405	Do CBHI solve the problem of health service expense of community	1. All most 2. Some 3. None 4. Don't know	

**Section. 5. Willingness to contribute for CBHI questions**

**Please read carefully to respond the question number 501 and 502,**

**Ethiopia Health insurance strategic plan scenario**

Ethiopia has launch health insurance schemes to increase resources for the health sector efficiency, promote sustainability and coverage of health service and ensure equitable distribution. These schemes are social health insurance for formal sector that includes government employees and community-based health insurance for informal sector. Due to the low-income level of population in the informal sector, it would be difficult to generate all revenue required to cover all health care costs from the population alone. Ethiopia ministry health plan merge CBHI and SHI in to single schemes. These who are in SHI (government employees, employers and enterprises) to support the finance of the CBHI

	Question and filter	Possible answers and coding	Skip

501	Based on the above scenario, would be willing to contribute to community-based health insurance?	1. Yes 2. No	if no skip Q 502
502	How Much Would you will to Contribute for CBHI?	_____.(ETB)	
503	If your answer is no for Q 501 specify your reason _____.		

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ANNEX IV. የመረጃ ቅፅ በአማርኛ  
አዲስ አበባ ዩንቨርሲቲ፤ ጤና ሣይንስ ፋኩልቲ ፤  
የህብረተሰብ ጤና አጠባበቅ ትምህርት ክፍል  
የመረጃ መሰብሰብያ መጠይቅ

የጥናቱ ስም :- የመንግስት ሠራተኞች ለማህበረሰብ አቀፍ የጤና መድሃኒት አባላት የገንዘብ ድጋፍ ለማድለግ ያላቸው ፈቃደኝነት እና ምክንያቶቻቸው ለማወቅ ጥናት እያደረገች ሲሆን አዲስ አበባ ዩንቨርሲቲ ፤ አ/አት/ት ቢሮ እና አ/አ ጤና ቢሮ ፈቃድ አግኝታለች የጥናቱ ዋና ተመራማሪ፡ እየሩሳሌም ተስፋዬ (በህብረተሰብ ጤና አጠባበቅ የመጀመሪያ ድግሪ)

የተቋሙ ስም:- አዲስ አበባ ዩንቨርሲቲ፤ ጤና ሣይንስ ፋኩልቲ ፤ የህብረተሰብ ጤና አጠባበቅ ትምህርት ክፍል።

የጥናቱ ወጪ የሚሸፍነው አካል:- አዲስ አበባ ዩንቨርሲቲ

የጥናቱ አላማ:- ይህ ጥናት ፖ.ሲ.ሲ. አውጪዎችንና ለሚመለከታቸው አካላት እንደ መነሻ ጥናት ያገለግላል የሚል እምነት አለን። የመንግስት ሠራተኛው ስለማህበረሰብ አቀፍ የጤና መድሃኒት ያላቸው ግንዛቤ እንዲሁም ድጋፍ ለማድረግ ያላቸው ፍላጎት እና ምክንያቶቻቸው ለማወቅ የሚረዳ ነው።

ያለመሳተፍ ወይም በመሀል የማቋረጥ መብት፡ እርስዎ ለዚህ ጥናት የተመረጡት ያለምንም ቅድመ ሁኔታ ሲሆን፤ በእርስዎ ፈቃደኝነት ላይ ብቻ የተመሰረተ ነው። በዚህ ጥናት ላይ ያለመሳተፍ መብቶ የተጠበቀ ነው። ነገር ግን የእርስዎ ተሳትፎ ለዚህ ጥናት ያለው አስተዋፅኦ የላቀ ስለ ሆነ እንዲሳተፉ እናበረታታለን። ለመሳተፍ ፈቃደኛ ከሆኑ በኋላ በፈለጉት ጊዜ ማቆም ሆነ ማቋረጥ ይችላሉ። ይህ መጠየቅ እስከ 20 ደቂቃ ይፈጃል።

ሚስጥራዊነት፡ በዚህ መጠይቅ ላይ የእርሶዎን ማንነት ሊገልፅ የሚችል መረጃ አይጻፍም፡ ጥቅም እና ጉዳት፡ በዚህ ጥናት ላይ በመሳተፍዎ የሚገኙት የተለየ ጥቅም ጥቅም አይኖርም ሊያሳስብዎ የሚችል ጉዳት ሆነ ስጋት የለም።

ጥያቄ ካልዎት ለበለጠ መረጃ እየሩሳሌም ተስፋዬ ብለው በ 0113720510 ደውለው መጠየቅ ይችላሉ።

❖ ከላይ በተሰጠው መረጃ መሠረት በጥናቱ ላይ ለመሳተፍ ፍሬቃደኛንዎት

ሀ) አዎ

ለ) አይደለሁም

ፈቃደኛ ካልሆኑ ምክንያቱን ጠቅሰው ወደ ሚቀጥለው ተሳታፊ ይለፉ

የመረጃስብሳቢው ስም:-----

ፊርማ:----- .

• የመጠይቁ ቁጥር -----

• የመጠይቁ ውጤት

1. ሙሉ በሙሉ የተሞላ

2. በከፊል የተሞላ

3. ምንም ያልተሞላ

በተቆጣጣሪዎች ተረጋግጧል

ስም -----

ፊርማ-----

ANNEX VI. አማርኛ መጠይቅ

**ክፍል 1: የግለሰብ ማህበራዊና ኢኮኖሚያዊ ሁኔታ የተመለከተ መጠየቅ**

ተ.ቁ	ጥያቄ	አማራጭ መልስ	ይዘለል
111	ጾታ	1) ወንድ 2) ሴት	
112	እድሜዎ ስንት ነው?	_____ አመት።	
113	በአሁኑ ወቅት የጋብቻዎ ሁኔታ እንዴት ነው?	1. ያላገባ/ች 2. ያገባ/ች 3. በህግ አግብቶታል/ች 4. ባልቆይ/ሚሰጡ በሞት የተለየው	
114	ያጠናቀቁት የትምህርት ደረጃ ስንት ነው?	1. የመጀመሪያ ደረጃ (1-8) 2. ሁለተኛ ደረጃ (9-12) 3. ዲፕሎማ 4. ድግሪ እና ከዛ በላይ	
115	ሀይማኖትዎ ምንድን ነው?	1. ኦርቶዶክስ ክርስቲያን 2. እስልምና 3. ፕሮቴስታንት ክርስቲያን 4. ካቶሊክ ክርስቲያን 5. ሌላ(ይገለፅ) _____ ።	
116	እርሶን ጨምሮ የቤተሰብ አባላት ብዛት ስንት ነው?	_____ ።	

117	ከድርጅቱ የሚያገኙት የወር ገቢዎ ምን ያህል ነው?	_____ ብር።	
118	ሌላ ተጨማሪ የወር ገቢ አሎት?	1. አዎ 2. የለኝም →	ወደተ.ቁ 120 ይሂዱ
119	ከተጨማሪው የገቢ ምንጭ አማካይ የወር ገቢዎ ምን ያህል ነው?	_____ ብር።	
120	የስራ ልምድ?	-----ወር -----አመት	
121	የሚሰሩበት ድርጅት የትኛው ሴክተር ላይ ይመደባል?	1. የትምህርት 2. የጤና 3. የአስተዳደር	

ክፍል 2. የጤና ሁኔታ እና የህክምና አገልግሎት አጠቃቀም

ተ.ቁ	መጠይቅ	አማራጭ መልስ	ይዘለል
201	ካለፉት 12 ወራቶች ውስጥ እርሶዎ የጤና እክል ገጥሞታል?	1. አዎ 2. አይደለም →	ወደተ.ቁ 203 ይሂዱ
202	የህክምና እርዳታ ለማግኘት በመጀመሪያ ወዴት ሄዱ?	1. የመንግስት የጤና ተቋም 2. የግል የጤና ተቋም 3. የባህል ህክምና	

		4. የሃይማኖት ቦታ 5. የመዳሀኒት መደብር 6. ሌላ ካለ ይገለፅ ::	
203	ለረጅም ጊዜ የሚቆይ የጤና እክል አለብዎ?	1. አዎ 2. አይደለም →	ወደ ተ.ቁ 205 ይሂዱ
204	ለረጅም ጊዜ የሚቆይ የጤና እክሎ ምንድር ነው?	1. የስኳር በሽታ 2. የደም ግፊት በሽታ 3. የሚጥል በሽታ 4. ሌላ (ይገለፅ) ::	
205	ካለፉት 12 ወራቶች ውስጥ በጤና ተቋም ተኝተው የህክምና አገልግሎት አግኝተው ያውቃሉ?	1. አዎ 2. አይደለም →	ወደ ተ.ቁ 207 ይሂዱ
206	ለምን ያህል ጊዜ በጤና ተቋም ውስጥ ተኝተው የህክምና አገልግሎት አገኙ?	1. አንድ ሳምንት እና ከዛ በታች 2. ከአንድ ሳምንት በላይ	
207	የህክምና ወጪዎን እንዴት ይከፍላሉ?	1. የግል ገንዘብ 2. ብድር 3. የጤና መድሀን 4. ንብረት በመሸጥ 5. ሌላ ካለ ይገለጽ ::	

208	የጤናዎ ሁኔታ እንዴት ይመዘኑታል?	<ol style="list-style-type: none"> <li>1. እጅግ በጣም ጥሩ</li> <li>2. ጥሩ</li> <li>3. መካከለኛ</li> <li>4. መጥፎ</li> <li>5. አላወቅም</li> </ol>	
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**ክፍል 3: የግለሰብ ስለማህበረሰብ አቀፍ የጤና መድሀንያለው ግንዛቤ**

ተ.ቁ	ጥያቄ	አማራጭ መልስ	ይዘለል
301	<p>ለጤና አገልግሎት ሚውለው መቀለ ነዋይ ከየት ይገኛል? ( ከአንድ በላይ መልስ ይቻላል)</p>	<ol style="list-style-type: none"> <li>1. ከግለሰብ ኪስ ገንዘብ</li> <li>2. ከመደበኛ የመንግስት በጀት</li> <li>3. ከመንግስት የጤና መድሀን ኤጀንሲ</li> <li>4. ከግል የጤና መድሀን</li> <li>5. ካሰሪዎች</li> <li>6. ከዓለም አቀፍ የእርዳታ-ድርጅቶች</li> <li>7. አላውቅም</li> </ol>	
302	ጤናመድሀን ምን እንደሆነ ያውቃሉ?	<ol style="list-style-type: none"> <li>1. አዎ</li> <li>2. አላውቅም</li> </ol>	
303	<p>ለጥያቄ ቁጥር 302 መልሶ አዎ ከሆነ የጤና መድሀን ዓላማ/ዎች ምንድርነው/ ናቸው? ( ከአንድ በላይ መልስ ይቻላል)</p>	<ol style="list-style-type: none"> <li>1. ኪስ ገንዘብ ወጪን በመቀነስ የህክምና አገልግሎት-ተጠቃሚነት ማሳደግ</li> <li>2. በህመም ጊዜ የሚያጋጥም የወጪ ጫና ለመቀነስ</li> <li>3. ለጤና ተቋማት የሚውል ገቢ በመጨመር ጥራቱን ማሳደግ</li> <li>4. ተጠያቂነት ለማጎልበት</li> </ol>	

		<p>5. ለጤናው ሴክተር ተጨማሪ ገቢ ምንጭ ማስገኘት</p> <p>6. አላውቅም</p>	
304	<p>ለጥያቄ ቁጥር 302 መልሶ አዎ ከሆነ የጤና መድሀን ዓይነቶች ወይም ዘዴዎች እንማን ናቸው? (ከአንድ በላይ መልስ ይቻላል)::</p>	<p>6. የግል ለትርፍ የተቋቋመ የጤና መድሀን</p> <p>7. የግል ለትርፍ ያልሆነ የጤና መድሀን</p> <p>8. ማህበራዊ የጤና መድሀን</p> <p>9. ማህበረሰብ አቀፍ የጤና መድሀን</p> <p>10. አላውቅም</p>	
305	<p>ስለማህበረሰብ አቀፍ የጤና መድሀን ስምተው ያውቃሉ?</p>	<ul style="list-style-type: none"> <li>• አዎ</li> <li>• አላውቅም →</li> </ul>	<p>ወደተ.ቁ 308 ይሂዱ</p>
306	<p>ለጥያቄ ተ.ቁ-305 መልስዎ አዎ ከሆነ የመረጃ ምንጭ ምንድን ነው?</p>	<p>1. ቴሌቪዥን/ራዲዮ</p> <p>2. ክቤተሰብ</p> <p>3. የስራ ባልደረባ</p> <p>4. ሌላ ካለ ይገለጽ</p> <p>_____ ::</p>	
307	<p>የማህበረሰብ አቀፍ የጤና መድሀን ለየትኛው ማህበረሰብ ክፍል የተዘጋጀ ነው?</p>	<p>1. መደበኛ በሆነ ክፍል ኢኮኖሚ ላይ ለተሰማሩ</p> <p>2. መደበኛ ባለሆነ ክፍል ኢኮኖሚ ላይ ለተሰማሩ</p> <p>3. አላውቅም</p>	
308	<p>የማህበረሰብ አቀፍ የጤና መድሀን ተመላላሽ ህክምናን ይሸፍናል::</p>	<p>1. አዎ</p> <p>2. አይደለም</p>	
309	<p>የማህበረሰብ አቀፍ ጤና መድሀን አባል ያልሆኑ ለሚቀጥለው ዓመት መዋጮ</p>	<p>1. አዎ</p> <p>2. አይደለም</p>	

	ማድረግ አለባቸው ብለው ያሰባሉ?		
310	ለመንግስት ሠራተኛ ህብረተሰብ ክፍል ማህበራዊ የጤና መድሀን መታቀዱን ያውቃሉ?	1. አውቃለሁ 2. አላውቅም	

**ክፍል 4: ስለማህበራዊ ተሳትፎ ጥያቄ**

ተ.ቁ	መጠይቅ	አማራጭ መልስ	ይዘለል
401	ሃይማኖታዊ መሀበራት ላይ ተሳትፎ ያደርጋሉ?	1. አዎ 2. አይደለም	
402	በእቁብ የቁጠባ ማህበር ላይ ተሳትፎ ያደርጋሉ?	1. አዎ 2. አይደለም	
403	እርስዎ ባሉበት ማህበረሰብ እርዳታ ለሚያስፈልገው ሰው አብዛኛው ህብረተሰብ ይረዳል።	1. እስማማለው 2. አልስማማም	
404	አሁን ባለው የመንግስት የጤና መድሀን ኤጀንሲ ላይ እምነት አለው?	• አዎ • የለኝም	
405	የማህበረሰብ አቀፍ የጤና መድሀን የማህበረሰቡን የጤና ችግር ያቃልላል ብለው ያስባሉ?	1. አዎ 2. አላስብም 3. አላውቅም	

**ክፍል 5: ለማህበረሰብ አቀፍ የጤና መድሀን ድጋፍ ለማድረግ ያላቸው ፈቃድኝነት**

ኢትዮጵያ ለጤናው ዘርፍ የሚውለውን መዋለ ነዋይ ለማሳደግ ቀጣይነት እና ሁሉን አቀፍ የጤና አገልግሎት እንዲሁም ፍትሃዊ ተጠቃሚነት ለማምጣት የጤና መድሀን ክፍሎች አቋቁማለች እነዚህም፤ የማህበራዊ የጤና መድሀን እና የማህበረሰብ አቀፍ የጤና መድሀን ናቸው። ማህበራዊ የጤና መድሀን የመንግስት ሰራተኛው የሚካተት ሲሆን፤ የማህበረሰብ አቀፍ የጤና መድሀን ደግሞ መደበኛ ባልሆነ ክፍለ ኢኮኖሚ ላይ የተሰማሩ እንዲሁም በግብርናና በአረብቶ አደር ስራ የሚተዳደሩት የህብረተሰብ አባላትን

ያክትታል።

የማህበረሰብ አቀፍ የጤና መድሀን አባላት ባላቸው ዝቅተኛ ገቢ ምክንያት በአባላቱ ብቻ ሙሉ ለሙሉ የጤና አገልግሎታቸውን ለመሸፈን የሚያስችል ገቢ መሰብሰብ አዳጋች ይሆናል።ይህን ችግር ለመፍታት የኢትዮጵያ ጤና ጥበቃ ሚኒስቴር ሁለቱን የጤና መድሀኖች በማቀናጀት የማህበረሰብ የጤና መድሀን አባላት ለማህበረሰብ አቀፍ የጤና መድሀን የገንዘብ ድጋፍ እዲያደርግ ነው።

	<u>መጠይቅ</u>	<u>አማራጭ መልስ</u>	<u>ይዘለል</u>
501	ከላይ የማህበረሰብ አቀፍ የጤና መድሀን የገንዘብ ድጋፍ ለማድረግ ፈቃደኛ ኖት?	1. አዎ 2. አይደለሁም →	ወደተ.ቁ 503ይሂዱ
502	ምን ያህል የገንዘብድጋፍያደርጋሉ (በወር/ በአመት ብለው ይግለፁ)	-----ብር	
503	ለተራ ቁጥር <u>501</u> መልሶ አይደለሁም ከሆነ ምክንያቱን ግለጹ። _____ ::		

# Curriculum vitae

## Personal information

- ✓ Full name: Eyerusalem Tesfay Beyene
- ✓ Address: Addis Ababa, Ethiopia
- ✓ Telephone: +251923294543/0911373545
- ✓ E-mail: [jerrytes2009.et@gmail.com](mailto:jerrytes2009.et@gmail.com)
- ✓ Date of Birth: march 20, 1995
- ✓ Gender: female
- ✓ Nationality: Ethiopian

## Educational Background

- ✓ **BSc** in public health officer from Samara University, Samara, Afar 09/2013 to 06/2016 CGPA: 3.3
- ✓ Masters of public health Candidate at Addis Ababa University

## Training Undertaken

- ✓ Scientific writing and communication, Addis Ababa University with the financial support from NORHED project December 3-7 2018
- ✓ Reproductive health commodity security, Addis Ababa University in collaboration with UNFP 2017.
- ✓ Project management , Addis Ababa University from August 27-11,2019

## Computer skill

- ✓ Basic computer skills:-
  - Microsoft office: Word, power point, Excel, and MS project
- ✓ Statistical software's
  - Statistical package for social science (SPSS)
  - Epi info
  - Epi Data

## Language skill

Language	Speaking	Writing	Reading	listening
English	Confident	Excellent	Excellent	Excellent
Amharic	Fluent	Excellent	Excellent	Excellent

## Reference

Name	Title/ position	Address;
Mr. Abel Gebre	Department Head of Public Health Department	Tell: 0913596094
