

Addis Ababa University College of Health
Sciences School of Public Health



Assessment of Factors Affecting Dropout of Community Based Health
Insurance in Yirgalem Town, Ethiopia.

By: - Yitayish Worku (Bsc)

Advisors: - Ato Gashaye Asrat (MPH)
Ato Tamiru Demeke (PHD Fellow)

A Thesis Submitted to the College of Health Sciences, School of Public
Health in Partial Fulfillment of the Requirements for the Master of Public
Health in Health Economics

JULY, 15, 2019

ADDIS ABABA, ETHIOPIA

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I, the undersigned, declared that this is my work and that all sources of materials used for this Thesis has duly acknowledged.

Name: Yitayish Worku

Signature: _____

Date of submission: _____

This thesis has been submitted for examination with my approval as University advisor.

Name of advisors: Ato Gashaye Asrat	Signature _____	Date _____
Ato Tamiru Demeke	Signature _____	Date _____

Internal examiner

Name _____

Signature _____

Date _____

External examiner

Name _____

Signature _____

Date _____

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Abbreviations

AA	Addis Ababa
AAU	Addis Ababa University
CBHI	Community Based Health Insurance
CI	Confidence Interval
E.C	Ethiopian Calendar
ERC	Ethical Review Committee
Km	Kilometer
LMIC	Low and Middle Income Countries
SNNP	South Nations Nationalities and People
SNNPR	South Nations Nationalities and Peoples Region
SRS	Simple Random Sampling
SPSS	Statistical Package for Social Science
HC	Health Center
HHs	Households
OOP	Out Of Pocket
UHC	Universal Health Coverage
W H O	World Health Organization

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Abstract

Back ground: To access quality of care and overcome catastrophic out of pocket expense nations working on community based health insurance whereby risk pooling and sharing. To achieve this, households enrolled in the insurance and also renewed their membership since health insurance is an instrument in achieving universal health coverage. Even if the amount of the initial up take and enrollment is important, high dropout rate endangers the sustainability of community based health insurance (CBHI) and enhances the existing enrollment problems.

Objectives: To asses factors affecting dropout of community based health insurance (CBHI) members from community based health insurance (CBHI) scheme.

Methods: Community based cross sectional study design was employed using interviewer administered questioners and supplemented by qualitative in-depth interviewer questioners to assess factors affecting dropout of CBHI in Yirgalem town. 3 kebeles were selected by using simple random sampling method .And the study participants were selected by using systematic random sampling technique. The sample size required for the study is 376. Quantitative data was entered in to SPSS version 24 for analyses. Qualitative data was transcribed, analyzed manually using the thematic area analysis approach.

Results: The study found that educational statuses of respondents were found to be an associated factor for drop out of CBHI. Households who are illiterate were 1.73 times more likely to drop out from CBHI than those who were sinor and above, AOR = 1.73, 95% CI (0.365, 0.566). Socio economic status of households also affect dropout. Household with wealth status of low income were 2.5 times less likely to drop out from the CBHI than those medium wealth statuses, AOR = 2.5; 95% CI (1.89, 3.40). While households with higher income group were 1.58 times more likely to drop out than those middle income groups, AOR = 1.58; 95% CI (2.04, 4.89). Limited scope of illness covered by the scheme is also reason and positively correlated with members to drop out from their membership ($r=0.474$ at $p=0.00$).

Conclusion: This study brings reasons and factors for drop out of CBHI membership. It is found that education, socio economic status, limited scope of illness, distance from health facility, quality of health care services were correlated with dropout of CBHI.

Recommendation: Regional Health Bureau, Zonal and woreda health office should work to improve quality of health care service, availability of drugs and functionality of laboratory instruments.

Key words: community based health insurance, dropout, universal health coverage

1. INTRODUCTION

1.1 Background

To access quality of care and overcome catastrophic out of pocket expense and also to strength health care finance, nations working on community based health insurance whereby risk pooling and sharing. To achieve this, households could be convinced and enrolled in the insurance and also renewed since a crucial aspect of achieving universal health coverage is develop a financial risk pooling system that cross subsidization in health system ,which is health insurance. It is an instrument in achieving universal health coverage. So to expand risk poling, to move towards universal health coverage user out of pocket payments must be reduced and level of prepayment must be increased (1).

Universal healthcare coverage (UHC) has been problematic to achieve in many developing countries. The large populations of these countries are dependent on direct out of pocket (OOP) expenses, which include payments for medicine and other health services (2). The World Health Organization (WHO) views medical fees as a significant obstacle to health care coverage and stated that the only way to reduce direct payments governments are encouraged community based health insurance (CBHI) as an alternative to user fees (2). Community based health insurance scheme has designed to insure that sufficient resource are available for members to access effective health care (3).Contributions are accumulated and managed to spread the risk of payments for health care among all scheme members.

Annually 150 million peoples face catastrophic direct out of pocket health expenditure (OPE), from these over 90% occurred in low and middle income countries (LMICs). Most developing countries were promised to achieve universal health coverage (UHC) by minimizing out of pocket expenditure (OPE) through risk pooling mechanism established community based health insurance (CBHIs) for their rural and informal worker segment of citizens (4).

Although initial enrollment is important scheme sustainability clearly requires renewal of membership. But low enrolment of peoples in to the CBHIs is common problems for most LMICs. Those studies that dealt with the renewal of CBHI membership revealed that the dropout rate is very high. For instance, in Gujarat and Maharashtra district of India the drop-out rate from community based health insurance (CBHI) was 49% and 67% respectively(5).

Limited benefit packages, exclusion of out-patient services, slow claims processing times and the gaps between the amounts claimed and amounts paid out by insurance, low level of awareness about the CBHI schemes, affordability and no-claim in the previous term were the primary reasons for dropping out of community based health insurance (CBHI) scheme (5).

In Africa from 900 million peoples would be a member, only 2 million or 0.2% is enrolled. In sub-Saharan countries, exception of Ghana and Rwanda membership ratio is below 10%. (3, 6-8). In Guinea-Conakry, the initial enrolment rate of community based health insurance (CBHI) in 1998 was 8% but this enrollment rate was declined to 6% a year later in 1999. The main reasons for non-enrolment and drop-out were scheme affordability, Poor quality of care and inability to pay the premium (5).

In the Nouna district of Burkina Faso, the enrollment rate was between 5.2% and 6.3% in 2004 to 2006 respectively. However, in 2005 and 2006, the dropout rate was 30.9% and 45.7% respectively (9). The study done in this area shown the reason for drop out were female household head, higher age or lower education of a household head, lower range of illness episodes in the past three months, fewer children or elderly in a household, poor perceived health care quality, less seeking care in the past month positively effected on drop-out, increasing the rate (9).

In Senegal, in three CBHI schemes that were established between 1997 and 2001, in 2009 their dropout rate was between 58 and 83%. Perception of poor quality of health services is identified as the most important determinant of drop-out. (10).

In Ethiopia, the enrolment ratio of 13 first piloted woredas, in June, 2015 is 48 %(41% payers and 7% fee waiver. And the dropout rate from CBHI stands at 18% reason for dropped out of community based health insurance CBHI) were affordability of premiums and expected returns from the insurance(9, 11).

The study area Yirgalem town which is located in Sidama zone of SNNPR the enrollment rate were 57 % in 2014/15. But this enrollment was decreased by 23% (CBHI) as the scheme report 2016/17).

Even though the government of Ethiopia endorsed and launched CBHI pilot in some selected woredas of different region, still its dropout in Yirgalem town, remain the main challenge. Socio-economic, demographic as well as scheme related factors takes a great share for high dropout of CBHI.

Moreover, there was no study conducted in Yirgalem town that documented the factor which affects dropout of community based health insurance scheme.

1.2 Statement of the problem

There is growing world attention on moving towards universal health coverage, and health insurance is instrumental in that endeavor. As a prepaid financing system, health insurance ensures collective pooling of risks and the redistribution of financial resources in a way that guarantees financial protection against the cost of illness (12).

Health problem leads to direct expenditures for medicine, transport and treatment as well as to indirect costs related to a reduction in labor supply and productivity (3). Lack of financial protection lead to elimination from health care and impoverishment, trapping families in a cycle of poverty and ill health is the main challenge in low and middle income country (4).

Many low and middle income countries including Ethiopia are faced with the challenge of rising sufficient funds to finance health service in equitable way (2). Many of these countries are dominated by direct out of pocket payments for healthcare financing (6). Out of pocket payments for health care lead to decreased use of health services and catastrophic health expenditure. Many households lack adequate financial protection and face financial catastrophic (1).

To reduce out of pocket payments and improve access to health care services most developing countries has introduced community based health insurance (CBHI) schemes especially for those in rural community or who work in the informal sector (14).

Community based health insurance (CBHI) has become a primary way of financing health care in several developing countries including Ethiopia (2). To achieve this, households could be convinced and enrolled in the insurance. In June 2011, the Government of Ethiopia launched a pilot Community-Based Health Insurance (CBHI) scheme. The scheme was rolled out in 13 rural districts located in four main regions (Tigray, Amhara, Oromiya and southern nations, nationalities and people (SNNPR) (15). And 48% of households were enrolled in June 2015) but 18% of households who had enrolled in the first year discontinuing their subscription in the second year (16, 17).

Even if initial enrollment is important higher dropout rate endangers sustainability of community based health insurance (CBHI). Because it is not only reduce the size of the insurance pool, but also it bears a negative impact on further enrolment and drop-out and enhances the existing problem(17).

According to Ethiopian health insurance report in the study area, 5000 households are eligible and expected to be enrolled in community based health insurance (CBHI) in 2011. Out of these households in 2015 only 2853 (57%) of them were enrolled. Out of enrolled households, 2398(84%) of them were payers while 455 (16%) of them were user of fee waivers of scheme. According to the scheme report from 2853 member households 2169 were remains in 2016 and also from these member households 1015 households remains in 2017.

It is the only town set up among the first 13 piloted woredas and what makes it different for high dropout rate and dropout of community based health insurance which is done in Ethiopia didn't see specifically for yirgalem town it saw as the national level for 13 piloted woredas and also when they did drop out of community based health insurance of Ethiopia they did not include the variable types of informal occupation. The entire above mentioned dropout rates indicate that the sustainability of CBHI is endangered. This study will try to investigate the main factors for dropout from community based health insurance (CBHI) in Yirgalem.

1.3 Significance of the Study

Community based health insurance (CBHI) is an instrument in achieving universal health coverage and to reduce the impact of catastrophic health expenditure. To sustain community based health insurance households should be enrolled and dropout rate must be low. So the findings of this study will provide evidence for the pertinent decision makers regarding the reasons for dropout from community based health insurance (CBHI) so that they will design appropriate system to reduce the dropout rate and to make the scheme sustainable.

2 LITERATURE REVIEW

2.1 Theoretical Aspects Community Based Health Insurance (CBHI)

Health safety is increasingly being recognized as integral part of any poverty reduction effort. (2). How to finance and keep this safety is the question of most developing countries. Many governments of lower and middle income countries (LMICs) have not been able to fulfill health care needs of their citizens and faced challenges of raising sufficient funds to finance health services in equitable way. It reflected by inefficient public health provision and by imposition of user fee charges for unacceptable quality of service. (2, 3). To overcome the challenge, in recent years community based health insurance has been promoted and implemented as part of health financing reform in many developing countries. (8). Community based health insurance (CBHI) basically has the following characteristics among others.

- a. It is established based on voluntary membership
- b. It does not have the objective of making profit
- c. Its aim is to pool risks
- d. Its ethics relies on mutual aid and solidarity.
- e. Its main objective is to provide financial protection to members against the catastrophic out of pocket expenditure.

In spite of these marvelous characteristics, community based health insurance (CBHI) could not be well expanded and did not bring significant changes due to the fact that the membership enrollment is still at lower level (6, 8).

The sustainability of community based health insurance (CBHI) scheme depends on the amount of member the scheme have, the risk profile of the enrolled members, contract on providers, scheme management and level of community participation but lower income countries face challenges to sustain their community based health insurance (CBHI) schemes due to the schemes serve small proportion of the eligible population with limited financial pool (1, 15).

Low enrollment rate reduce the opportunity of cross subsidization, affect financial sustainability, endanger scheme sustainability and reduce the power to negotiate from health service providers on quality of care. This situation back hinders the enrollment of communities in community based health insurance (CBHI) schemes(9).

In Africa have 900 million community based health insurance (CBHI) membership eligible population but only 2 million have enrolled that is 0.2% of the eligible population. The study conducted in 580 community based health insurance (CBHI) schemes show from which 95% have less than 1000 member only cover 10% of the population. The study carried in sub-saharan countries also shows except Ghana achieving 34% and Rwanda limited the enrollment rate on 10%. The scheme in addition to low membership ratio challenged by fluctuation of membership status (3, 8, 13, 18).

Community Based Health Insurance in Ethiopia

Ethiopia has started CBHI program since 2011 with selected 13 piloted woredas. The pilot woredas covered more than 1.6 million people, from which 90% are eligible for CBHI program. According to Abt association report of 2015, in piloted woreda 46% of the eligible population enrolled in to the scheme. The longitudinal study on panel data conducted on piloted woreda show the membership rate reached 48%. From these membership 41% were payers while 7% were fee waivers of the scheme(11).

Majority (82%) of those who enrolled in the first year renewed their subscriptions, while 25% who had not enrolled joined the scheme(19). Now the piloted program expand and cover around 198 woreda from which 136 woreda schemes officially launch and register 33% of their eligible population and have been started service(11). The study town has 5000 eligible households in 2011 and in 2015 have 2853 registered members which means 57 % of the eligible population from Ethiopian health insurance agency report and they are expected to pay premium monthly.

2.2 Empirical Results of Community Based Health Insurance (CBHI) Dropout

The study conducted in different countries and region shows community based health insurance (CBHI) enrollment affected by many factors with different significance and dimension.

In china farmers in high community reciprocity were 1.4 times more likely to join community based health insurance (CBHI) than farmers in low reciprocity (20, 22). Feature health risk affect health insurance enrollment. In china farmers who worry about feature health expenditure were 1.6-2.51 times more likely to join the scheme than farmers didn't worry. In accessibility of it might affect enrollment. It determines quality of care and perception of households in health care delivery quality (23).

The cross sectional study conducted in Tanzania show the wealthy households were between 1 -12% more likely to enroll than non wealthy(8).

The review of 25 studies conducted in seven countries reviewed the similar results in Cameron, Burkina Faso and Malaysia but study conducted in Nigeria shows opposite result wealthy households and individuals were less likely to enroll than less wealthy households (1, 8).

And also these study revealed that farmers have luxury asset are 1.37-1.66 times more likely to join the scheme than farmers don't have. The farmers with junior education were 1.37-1.45 times more likely to join the program than the illiterates (20). Households have additional member were 4.3% high chance to enroll than those didn't have. The same result on systematic review conducted in Nigeria but the opposite on Burkina Faso (3, 8). Christians were 6.7% more likely to join the scheme than other religions.

The qualitative part of the study indicate quality of care in public service ,low income level of the community, occupation of the household and the premium level affect membership (8).

The descriptive cross sectional study in carried in Cameron results knowledge on the concept of community based health insurance (CBHI) determines the enrollment decision of the households. Awareness about community based health insurance (CBHI) scheme also associated with level of education but not associated on sex, age, marital status, and monthly income of households. The systematic review result on studies conducted Burkina Faso and Rwanda shows the same result (3, 7).

Education about health insurance affect level of membership .The study conducted in Cambodia shows communities got education about the insurance were 33.8% more chance to participate in the program (21).A systematic review of 25 studies conducted in different countries produced opposite results that the studies conducted Nigeria, Ghana ,Mali, Senegal, Cameron and Burkina Faso young age(30-40 years) individuals were more likely to pay than old age (3, 5).

Affordability of health insurance contribution rate is the major barrier to enroll specially for the poor's. The cross sectional studies conducted in Ghana shows 64% of uninsured communities are uninsured because of they didn't afford the premium. Among them 100% were in first and second income quintile, 52% lived in rural areas and 85% are male(13).

A study conducted in Ghana, Mali and Senegal showed that the contribution rate mostly regressive flat rate it makes contribution expensive for the poor's and lay the burden on the rich (13, 18). The discrete choice experiment study in Cambodia indicate the change the premium price, the change in hospital fee coverage rate ,communication frequency of the scheme with the community were highly affect the larger size families than small household size families (24).

Occupations of individuals have association. The studies in Burkina Faso showed the urban dwellers were less likely to join than rural dwellers (25). The opposite result showed in study conducted in Ghana (3). Individual gender affects membership. Men's were found to be willing to pay than women in studies conducted on Burkina Faso and Nigeria (25, 26). The different result of studies conducted in Ghana ,Mali and Senegal which revealed women leads were more likely to join the scheme (3).

Health related factors highly affect membership. Individuals or households perceived quality of care were more likely to uptake than not perceived as reported in Burkina Faso and Nigeria, illness experience negative relation on Burkina Faso study(25, 26) Health status also determinant as seen in studies conducted in Cameroon and Nigeria (3). Distance from the health center positive determinant in up taking the program as seen a studies conducted in Nigeria and Burkina Faso (1).

The study conducted in different method and region shows CBHI drop out affected by many factors with different significance and dimension. An assessment of the literature suggests that there are four broad sets of factors affecting dropout rate of CBHI enrollment. These are scheme affordability, the low quality of care that may be accessed through the scheme, the health status of individuals and information failures, which include poor understanding of insurance in general and inadequate information on how to use the insurance scheme (10).

Two exceptions come from West Africa. One is a quantitative study of a community based health insurance (CBHI) scheme in Burkina Faso which had been operational for three years and had a drop-out rate of 30.9 to 45.7%. The study focuses entirely on demographic, economic and health-related indicators and finds that female household head, increased age, lower education, fewer illness episodes, fewer children or elderly in a household, poor health care quality, less seeking care, higher household expenditure and shorter distance to the contracted health facility were correlated with increased drop-out (9).

Other paper is a qualitative study from Guinea-Conakry where CBHI population coverage fell from 8% of the target population to about 6% in the following year. The main reasons for non-enrolment and drop-out were poor quality of care and inability to pay the premium (9, 10).

More recently, a study in Senegal showed that the more active the mode of participation, episodes of illness the lower was its drop-out and, on the other hand, people who dropped out were less inclined to actively participate, to trust management or to endorse the principles of risk-sharing (27). While a negative perception of quality of care increased scheme drop-out. Perception of poor quality of health services is identified as the most important determinant of dropout (15).

Health related factors highly affect drop out of CBHI. Member households were twice as likely to have had an illness, accident or injury, and nearly twice as likely to have a disability, than drop out members. They were more than twice as likely to be situated closer to a health service provider than drop out members(19).

Quality of health care service is one of determinant for drop out of CBHI. Members were three times more likely to report that health care access is an advantage of membership than dropout members. And had a much higher probability of reporting that the quality of health service providers was satisfactory. Three quarters of members felt that the quality of care of all the providers contracted by the scheme was satisfactory, compared to half of drop out members(10).

Rates of active participation ranged between 8% and 48% for drop out members and 20% and 65% for members. Members being more likely than drop out members to have heard of the scheme from a family member or friend compared to another source(10).

Socio demographic characteristics affect drop out of CBH. Series of studies conducted in Burkina Faso showed that factors resulting in high drop-out rates are similar to those resulting in low enrolment; female household head, higher age or lower education of a household head, lower range of number of illness episodes in the past three months, fewer children or elderly in a household, poor perceived health care quality, less seeking care in the Past month positively effected on drop-out(9). Quality of care is an important factor influencing enrolment and decision to drop-out of CBHI(21, 28).

The qualitative study revealed that those living far from the facility felt that they faced higher non medical costs when seeking care (due both to the cost of transport and to the opportunity cost of seeking care) and had therefore come to value community based health insurance (CBHI) as a tool to relieve them at least of part of the financial burden they faced when sick (28). Since the study identified that people living closer to the facility was also more likely to drop out.

The other studies also shows high dropout rate has been caused from factors of lack of adequate customer information, lack of understanding of insurance concept and benefit package ,lack of trust in insurer, perceived quality of health service, un affordability of contribution, time and frequency of payment, level of education of household, gender of household ,religion and exemption service (8, 13, 20, 21).

Differently, a higher household expenditure and a shorter distance to the contracted health facility increased the drop-out. The household heads in the drop-out group had a significantly lower education than in the non-drop-out group. The households in the drop-out group also had a significantly higher household size, were more likely to live in the town (9) .

In the case of Ethiopia's CBHI scheme, it was found that households that had greater knowledge about the community based health insurance (CBHI) scheme and those who had actually used services through the scheme were more likely to renew their contracts (29). There is longitudinal study conducted in 13 piloted woredas. This study was conduct in a cross sectional study design, with household survey because of time of study and financial barrier. The study area has high dropout rate among 13 piloted woredas. This study will identify the main factors enhancing households to drop out of CBHI in Yirgalem town and it will useful to woreda scheme to better plan and decision and to working strategically

3 Objectives

3.1 General objective of the study

To identify the main factors associated with the dropout of community based health insurance (CBHI) members from community based health insurance (CBHI) scheme.

3.2 Specific objectives

- 1.** To determine the effects of demographic trait on dropout rate from community based health insurance (CBHI) schemes.
- 2.** Effects of socioeconomic status on dropout rate from community based health insurance (CBHI) schemes.
- 3.** To determine effects of scheme related factors on dropout rate of community based health insurance scheme.

4. Methods and materials

4.1 Study areas

The study was conducted in Yirgalem town which is one of the piloted towns among 13 first piloted woredas, located in the Sidama zone of SNNP Regional State. It is located about 260 Km from Addis Ababa, the capital city of Ethiopia and 60km to the south west of Hawassa town, the capital of SNNPR; it has 13 kebeles and 5000 households who are eligible for community based health insurance (CBHI). According to the Central Statistical Agency's 2007 population census, the 2017 projected population estimation is 76,000 of which the female population accounts for 36,000 and the male population is 40,000. Regarding the health care facility, the town has one public hospital and one government health center and 20 different levels of private clinics and non-governmental clinics. The town is one of the piloted in SNNP region and has been started CBHI since 2011 and give health service by making agreement with health center and hospital.

4.2 Study period

The data collection was conducted during the period of January 1-15, 2018

4.3 The study design

Community based cross sectional study design was employed using interviewer administered questionnaires and supplemented by qualitative in-depth interviews.

4.4 Source of study population

All households who were members of community based health insurance (CBHI) and now dropped out from community based health insurance (CBHI) after one year of scheme function started and who renewed their subscription for at least one year in Yirgalem town.

4.5 Study population

Households who are drop out from community based health insurance (CBHI) scheme and who renewed their subscription for one year in Yirgalem town.

4.5.1 Inclusion criteria

Sampled respondents who were members of community based health insurance (CBHI) but now drop out and who renewed their subscription for one year.

4.5.2 Exclusion criteria

New members of community based health insurance (CBHI) during the time of data collection. i.e Whose enrolment is less than one year and also those households who are user of fee waivers of scheme.

4.6 Sample size determination

The sample size determination was done by using a formula for double population proportion as per the following assumption: 95% confidence level with margin of error (0.05).

Proportion: proportion p1 of dropout of CBHI and p2 proportion of renewed from pilot sample study p1=0.75 and p2=0.65 were taken from pilot study respectively.

$$n_1 = n_2 = \frac{\left(z_{\alpha/2} \sqrt{2\bar{p}\bar{q}} + z_{\beta} \sqrt{p_1q_1 + p_2q_2} \right)^2}{\Delta^2}$$

Where:

$$\bar{p} = \frac{p_1 + p_2}{2}$$

$$\bar{q} = 1 - \bar{p}.$$

$$\Delta^2 = p_1 - p_2$$

n= sample size required

Z= 95% confidence interval (1.96)

d= margin of error (5%)

Considering the above assumption, the sample size, n1=n2 was calculated as shown below:

$$n_1 = n_2 = (1.96\sqrt{2 \times 0.1 \times 0.9} + 0.84\sqrt{0.75 \times 0.25 + 0.65 \times 0.35})^2$$

$$\frac{1.96\sqrt{2 \times 0.1 \times 0.9} + 0.84\sqrt{0.75 \times 0.25 + 0.65 \times 0.35})^2}{0.1^2}$$

$$\frac{(1.96\sqrt{0.18} + 0.84\sqrt{0.1875 + 0.2275})^2}{0.1^2}$$

$$\frac{(0.8316 + 0.5411)^2}{0.1^2}$$

$$\frac{(1.373)^2}{(0.1)^2}$$

n1=n2 =188 I need approximately 188 subjects in each group

And the total sample size = 376

4.7 Sampling procedure

For quantitative study, since six kebeles were introduced community based health insurance (CBHI) among 13 kebeles three kebeles were selected by using simple random sampling method from the introduced six kebele. Then proportionate allocation of the sample for the respective kebeles, and lastly systematic sampling technique used for each kebele and applied to identify the required sample after determining the eligible groups in the respective kebele households. For selecting the study participants, the households were selected every 4th interval for selected kebeles.

Qualitative study; using purposive sampling method six in-depth interviews with community based health insurance scheme officers and four kebele managers were interviewed. This is because of the assumption that they have the greater and detailed information about the issue in question. In-depth interview provide much more detailed information about community based health insurance. It also may provide a more relaxed atmosphere to collect information. People feel more comfortable having conversation with the researcher about their program.

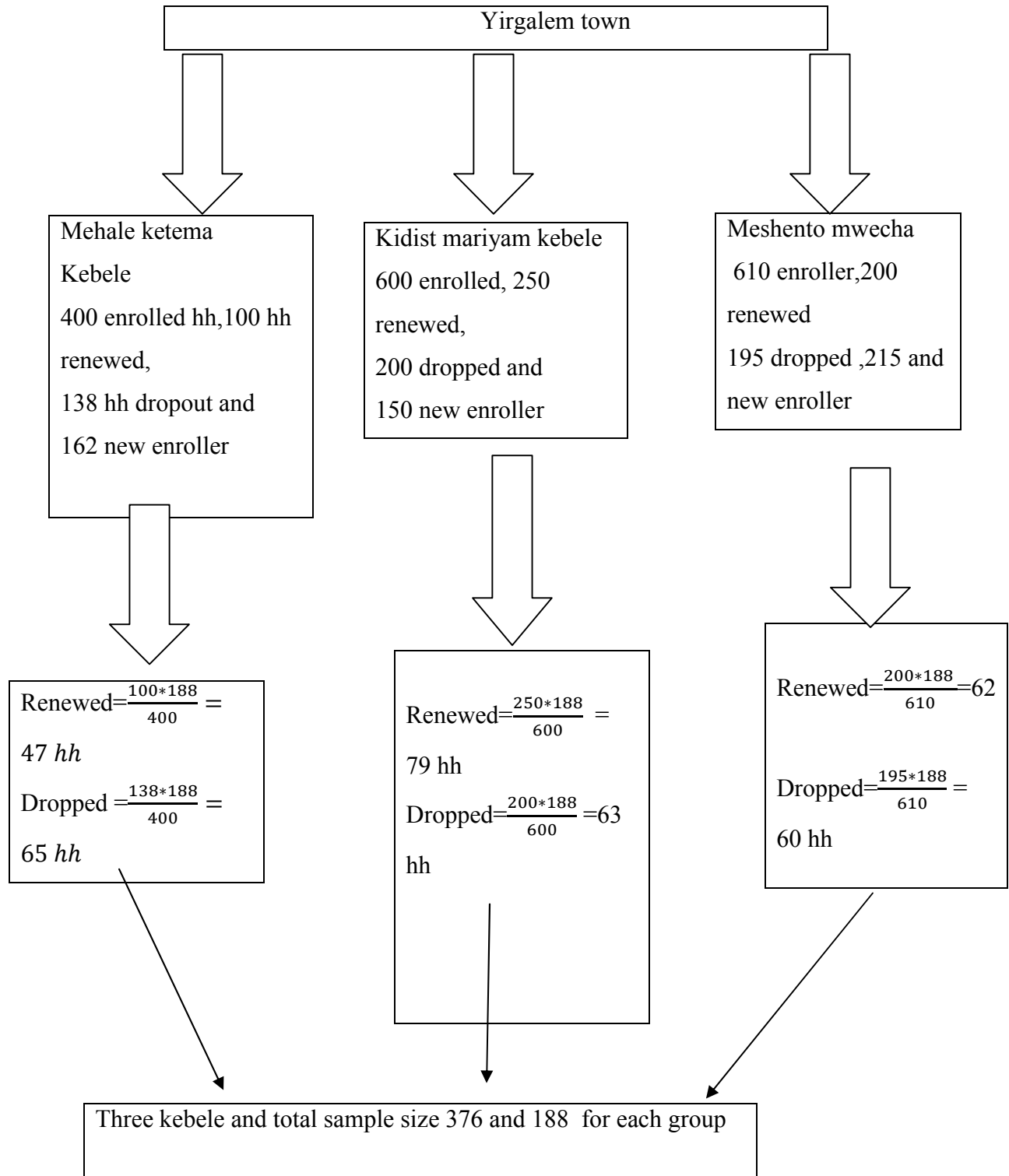


Figure: 1 sampling procedure

4.8 Study variables

4.8.1 Dependent variable

Drop out of CBHI membership

Dropped out=1 and Renewed =0

4.8.2 Independent variable

By considering different literatures studied on dropout from community based health insurance in different countries the independent variables that affect the dependent variable were listed below. So I used this variable by hypnotizing them.

- Demographic variables (age, gender, marital status and household size)
- Scheme related variables (contribution amount, benefit package, contribution collection time and frequency, scope of illness covered by the scheme, distance of the contracted health facility from members home,)
- Socio-economic variables (income, social practice experience and educational level)
- Quality of health service
- Trust of the program
- Types of informal occupation
- Distance from contracted health facility
- Year of enrollment

Hypothesis

H0: above the mentioned independent variables will not affect the dependent variables CBHI drop out vs H1: the above mentioned independent variables will affect the dependent variable CBHI dropout.

4.9 Data collection procedures:

For quantitative study a comparative based cross-sectional study design was employed, using an interviewer-administered structured questionnaire and for qualitative study open ended in depth questions to dig out additional information's which did not cover the questioner .The questionnaire were prepared by investigator, First prepared in English and then translated to Amharic language and then again back translated to English by expert knows both language to check the translation consistency. And also the scheme's reports of drop out, membership data and other relevant registration books were review.

The data collection was carried after getting permission from CBHI office of Hawassa district and woreda CBHI scheme. Data were collected at respondent's home for households and work place CBHI scheme workers and kebele managers. The data collection was carried out with the time period January 2018.

4.10 Personnel /data collectors

The number of data collectors and the time need for complete interview was estimated based on sample size. Four data collectors in community based health insurance scheme were recruited as data collectors for 15 days and training was given for two days on the objectives, relevance of the study and data collection techniques such as, interview techniques, confidentiality of the information, participants' right, information consent, and practical demonstration of the interview. Finally, the structured questionnaires were used for data collection. Two CBHI scheme officers were assigned as supervisors. The supervisors followed all the data collection procedures and reviewed all questionnaires on daily basis for completion, clarity, and proper identification of the respondents. Supervisors and data collectors were daily discussed, on faced problems during data collection until the data collection was accomplished.

4.11 Operational definition

- **Benefit package** :expected returns from the insurance
- **Community based health insurance**: one segment of health insurance initiated by government to serve communities engaged in informal sector
- **Contribution** : behalf of the calculated premium rate which the household should be paid to being a member

- **Dropout:** house hold who don't renewed their membership after a year(HHs who discontinue their membership)
- **Eligible households :** households working in informal sector and living permanently
- **Member:** households join to CBHI by paying the pre-set contribution and receive the scheme identification card
- **Household:** head of the family
- **Permanent:** households living greater than 6 month in the study area

4.12 Data quality management

To attain data quality, the questioner was pre-tested, the data was checked for completeness, accuracy, and those find missing in addressing important variables like the outcome and other important variables was discarded. The data were stored in a secure place for confidentiality and in time when the data was need for a backup of the data.

4.13 Data analysis procedure

The collected data were cleaned, coded and entered into SPSS version for descriptive and regression analysis. Two step (bivariable and multivariable) logistic regressions analysis were done for objective one and two i.e to determine effects of demographic traits and socio economic status on dropout respectively while for the third objective to determine effects of scheme related factor I used Pearson correlation analysis to see its linear associations of dependent variable dropout with scheme related variables; 95% confidence interval and p-value <0.05 power 80%. Potential predictors of dropout community based health insurance were assessed by using contingency table. The results were presented in the form of tables, figures, and text using frequencies and percentage to describe the study population in relation to relevant variables. The degree of significance and magnitude of bivariate association was assessed using binary logistic regression and its corresponding odds ratio and 95% confidence interval. All independent variables with p-value ≤ 0.25 in bivariate analysis were subjected to fit a multivariable logistic model for dropout/renewed and identify the independent contribution of each variable for the out-come variable. Finally, variables identified as associated ($P < 0.05$) with dropout CBHI through multivariable logistic regressing analysis were reported as predictors of dropout.

4.14 Model

community based health insurance(CBHI) involves dichotomous decision renewal of their subscription or dropped out from community based health insurance (CBHI) This situation will result in the outcome variable (variable of interest) to be binary in nature. When the outcome variable is dichotomous, the possible binary regression model is the linear probability model (LPM) in which the binary response variable is regressed on the relevant explanatory variables by using the standard OLS methodology. But linear probability model (LPM) suffers from several estimation problems due to its restrictive fundamental assumption that the probability of something happening increases linearly with the level of the explanatory. This very restrictive assumption can be avoided if we use the logit and probit models(30).

Logit models impose the condition that predicted values must be on the unit interval, and produce consistent covariance matrix estimates assuming the distributional assumptions are correct. On the other hand, linear regression models have the disadvantages that predicted values may be less than zero or greater than one, and that the OLS covariance matrix estimate is inconsistent (31).

Therefore, this study will use logit model where the dependent variable is the log of the odds ratio, which is a linear function of the predictors. If the data are available at the individual or micro level, nonlinear-in-the-parameter estimating procedures (maximum Likelihood) can be employed to estimate the parameters of predictors.

The logit model can be as:

$$Y = \beta_1 + \beta_i X_i + u_i \dots \dots \dots 1$$

Where:

Y = is a dichotomous dependent variable

β_1 = constant

β_i = parameter of X_i predictor

X_i = is i^{th} independent variable in the model

u_i = is the error term

More specifically for this study the above stated model can be written as follows to express CBHI dropped out from CBHI scheme

$$CBHI\ dropout = \beta_1 + \beta_2 AG_i + \beta_3 ED_i + \beta_4 FS_i + \beta_5 GHH_i + \beta_6 CCTF_i + \beta_7 QHS_i + \beta_8 TP_i + \beta_9 CPHS_i + \beta_{10} FHE_i + \beta_{11} I_i + \beta_{12} SPE_i + \beta_{13} CA_i + \beta_{14} BP_i + \beta_{15} TIO_i + \beta_{16} DHF + u_i \dots 2$$

Where:

CBHI dropout = The outcome variable taking a value of 1 if members of CBHI dropped out from CBHI scheme and 0 other wise.

AG =Age of the households

ED =Educational level of the households

FS =Family size

GHH = Genders of house hold head

CCTF = Contribution collection time and frequency)

QHS =Quality of health service

TP = Trust of the program

CPHS = Current and past health status

FHE =Feature health expectation

I = Income,

SPE = Social practice experience

CA = Contribution amount,

BP = Benefit package

TIO = Types of informal occupation

DHF = *distance of health facility*

From the above stated model the probability of dropped out from CBHI scheme is given by the expression $p_i = \frac{1}{1+e^{-z_i}}$ where $z_i = \beta_1 + \beta_2 X_i$ and the probability of renewal of their subscription is given

as $1 - p_i = \frac{1}{1+e^{z_i}}$. Hence, the log of the odds ratio is the natural log of the two probabilities i.e. $(\frac{p_i}{1-p_i})$.

However, the basic disadvantage of the logit model is the coefficients it is difficult to interpret the coefficients of the estimated model and we depend our interpretation on the odds of occurrence of an event by estimating the odds ratios.

4.15 Analysis of qualitative data:

Qualitative data was transcribed, analyzed manually using the thematic area analysis approach

4.16 Ethical consideration

The actual data collection was started after ethical clearance letter obtained from AAU of Ethical Review Committee (ERC) of college of health Sciences, School of Public Health, and support letter was obtain from SNNPR Health Bureau regional state and Yirgalem town CBHI scheme. Formal letter of cooperation were taken to each Kebele from town CBHI scheme and verbal consent was obtain from individual participant by explaining the aim of the research. Participants were inform that participation are voluntary, they have full right to refuse from participation or withdraw from the study at any time they want, without losing any of their right not force to stay in study and individual confidentiality is secure.

4.17 Dissemination of results

The final study report is submitted to yirgalem town of CBHI scheme and SNNP Regional Health Bureau, sidama administrative zone and Ethiopian health insurance agency and thesis will also be submitted to AAU College of Health Sciences, School of Public Health and as hard and soft copy.

5 Results

In this chapter, the major findings of the study based on the data obtained through household interview and in-depth interview for CBHI scheme officers and kebele managers are presented, analyzed and interpreted. The data are presented and organized in a sequential order in line with the specific objectives stated under the first chapter of the thesis.

5.1 Background Characteristics of Respondents

The background characteristics of respondents consisting of their sex composition, age group, marital status, household size, educational level of head of the household, religion, ethnicity, occupation and income of households.

Out of 376 respondents identified for the study, 188 were for households who renewed their memberships while the rest 188 were households who did not renew their CBHI membership. All of 376(100%) were responded to the interview.

5.2 Sex, Age Composition and Marital Status of the Respondents

Of the total head of household respondents, majority of the respondents were females 295 (78.5%). The mean ages of the respondents were 47.7, while the minimum and the maximum age was 24 and 81 respectively. About 225 (60%) of households were in the age group 24-49 while 151 (40%) of them was 50 and above 50 years. In line with marital status of households majority of the respondents were married constituting 349(93%). The dominant religion was orthodox 173 (46%) followed by Protestant religion followers 145(39%). And also the dominant ethnic group was sidama, constituting 172 (46%).

5.3 Educational Level of Respondent

Regarding to educational status of households 93 (25%) of the respondents were junior secondary (5-8), 106 (28%) of the study participants were elementary (1-4), 59 (16%) of households were reads and write only and 52 (14%) of households were illiterate, 43(11%) of households were secondary (9-10) and 23 (6%) of households were sinor secondary and above.

5.4 Family Size of the Respondent

Concerning family size of respondents, 220 (59%) of households have five and less than five family members and 156 (41%) of households have more than five family size.

5.5 Respondents Level of Income

With regard to wealth status of study participants were determined by dividing the respondents based on their total assets into three status as low income, middle income and higher income after determining the asset amount ceilings; The classification of households into three wealth groups' considered the assets of the entire sample. 203 (54%) of households were low income, 88 (23%) of households were middle income and 85 (23%) of households were high income households.

5.6 Respondents' occupations

Concerning to their occupation 113(30%) of households were dailiy labour, 128(34%) of households were merchants, 30(7%) of householdd were farmer and 47(13%) of households were house wife.

5.7 Years of enrollement

The respondents were asked about their year of enrollment and according to their responses, 206(55%) of households were enrolled for less than three years and 170(45%) of households were enrolled for more than three years.

Table 1 Socio-economic and Demographic Characteristics of Respondents

Independent variables	Category	Dropout		Total Frequency	Total percent
		No	Yes		
Sex	Male	42(11.1%)	41(10.9%)	81	22
	Female	146(38.8%)	147(39%)	295	78
Age	24-49	116(31%)	109(29%)	225	60
	≥50	72(19%)	79(21%)	151	40
Education	Illiterate	10(3%)	40(10%)	50	13
	Read and write only	37(8.85%)	32(8.5%)	69	18
	Elementary (1-4)	56(15%)	40(10.5%)	96	25.5
	Junior secondary (5-8)	50(13.5%)	43(11.5%)	93	25
	Secondary (9-10)	23(6%)	22(5%)	43	11
	Sinor secondary (11-12) and above	12(3%)	11(3%)	23	6

Religion	Orthodox	86(23%)	87(23%)	173	46
	Protestant	66(17.5%)	79(21%)	145	38.5
	Catholic	2(0.5%)	0(0%)	2	0.5
	Muslim	36(8.5%)	20(6.5%)	56	15
Ethnicity	Sidama	76(20%)	96(26%)	172	46
	Amhara	57(15%)	41(11%)	98	26
	Guragie	29(8%)	19(4%)	46	12
	Oromo	8(2%)	13(3%)	21	5
	Selita	11(3%)	5(1%)	17	4
	Welayita	7(2%)	14(3%)	21	5
Marital status	Single	7(1.5%)	2(0.5%)	9	2
	Married	170(45%)	179(47.6%)	349	92.6
	Divorced/separated	4(1%)	2(0.6%)	6	1.6
	Widower/widowed	7(1.9)	5(1.1%)	12	3
Occupation	Farmer	12(3.2%)	18(3.8%)	30	7
	Petty trader	27(7.2%)	4(1.8%)	31	8
	Daily labour	56(15%)	57(15%)	113	30
	Merchant	55(14.5%)	73(19.5%)	128	34
	Others	38(10.3%)	36(9.85%)	74	20
Family size	≤ 5	113(30%)	107(28.5%)	220	58.5
	>5	75(20%)	81(21%)	156	41
Wealth status	Low	111(30%)	92(24%)	203	54
	Medium	44(11.5%)	44(11.5%)	88	23
	High	33(8.7%)	52(14%)	85	23
Year of enrolled	1-3	93(25%)	113(30%)	206	55
	3-7	95(25)	75(20%)	170	45

5.8 Demographic traits of households

From the total study participants 148(39%) of households were female and 40(10.9%) of households were male that were dropped from CBHI scheme while 147(38.8%) were female and 41(11.1%) were male from households who renewed their CBHI membership.

Additionally 109(29%) of households were in the age group of 24-49 years and 78(21%) of households were above 50 years were from dropped out households while 116(31%) of households were in the age group of 24-49 and 72(19%) were above 50 years old were households who renewed their CBHI cards.

The main aim of community based health insurance is to help members to meet costs of treatment when the family member fell ill, and this was important because of the uncertainty associated with illnesses and the high costs of treatment. Household head who is members of community based health insurance(CBHI) whose family members are above 18 years old did not renewed community based health insurance (CBHI) cards because the program excludes their children of this age group to use the health care service from the contracted health facility. (In depth interviewee kebele manager man age 50)

Concerning to their marital status of households 179 (47.6%) of households were married, 2 (1%) of households were single, 5 (1.1%) of households were widowed and 2 (0.6%) of households were divorced from the dropout households while 170 (45%) of households were married, 7(1.9%) of households were single, 7 (1.9%) of households were widowed, 4 (1%) of households were divorced households who were renewed their CBHI cards.

Community based health insurance is introduced to reduce out of pocket payments and improve access to health care services especially for rural community and for those informal sectors. But from the marital status of married family groups one of the household head is informal sectors worker and his wife is employers of the government office worker and there is no clear rule to enroll; even if they enroll and his wife cannot use the services because her job prevents to use health care service from the contracted health facility by using community based health insurance card. When this condition happen house hold head did not renew his service card and discontinued from CBHI programs. (In depth interviewee kebele manager man age 45).

From study participants concerning to their family size 107 (28.5%) of households have five and less than five family members and 81(43%) of households have more than five family size from dropout

household members where as 113 (30%) of households have five and less than five family members and 75 (20%) of households have more than five family size in renewed household groups.

And also community based health insurance members that have large family size said that even though the premium payment is equal irrespective of family size it is difficult to us to renew CBHI card as we have large family size it is difficult to eat them to buy cloths school materials such as uniform, exercise book, pen , pencil etc and it's better to eat them rather than paying premium.(In depth interviewee kebele manager man age 45)

Table 2: Demographic traits of respondents

Independent variables	Category	Dropout		Total Frequency	Total percent
		No	Yes		
Sex	Male	42(11.1%)	41(10.9%)	81	22
	Female	147(38.8%)	148(39%)	295	78
Age	24-49	116(31%)	109(29%)	225	60
	≥50	72(19%)	79(21%)	151	40
Marital status	Single	7(1.5%)	2(0.5%)	9	2
	Married	170(45%)	179(47.6%)	349	92.6
	Divorced	4(1%)	2(0.6%)	6	1.6
	Widower/widowed	7(1.9)	5(1.1%)	12	3
Family size	≤ 5	113(30%)	107(28.5%)	220	58.5
	>5	75(20%)	81(21%)	156	41

5.9 Socio economic status households

From the total study participants 43 (12%) of the respondents were junior secondary (5-8), 40 (11.5%) of the study participants were elementary (1-4), 32 (8.5%) of households were reads and write only and 40 (11.5%) of households were illiterate from the households who were dropped from CBHI scheme 56 (14.5%) of households were elementary(1-4), 50 (13%) of study participants were junior secondary (5-

8), 37 (8.85%) of households were who reads and writes only were from the households who were renewed their CBHI membership.

And also from study participants 92 (24%) of households were low income, 44 (11.5%) of households were middle income and 52 (14%) of households were high income households from dropout household members while 111 (30%) of households were low income, 44 (11.5%) of households were middle income and 33 (8.5%) of households were high income households were from renewed household groups.

When CBHI members fill ill and go to the contacted health center and if there is no laboratory instrument and drug in the pharmacy of health center they must refer to yirgalem hospital but this was not done instead they order to private clinic incurred for un expected catastrophes health care expenditure. (In-depth interviewee man kebele manager, age- 55).

Table 3: Socio economic status of respondents

Independent variables	Category	Dropout		Total Frequency	Total percent
		No	Yes		
Education	Illiterate	10(3%)	40(11.5%)	50	14.5
	Read and write only	37(8.85%)	32(8.5%)	69	18
	Elementary (1-4)	56(14.5%)	40(11.5%)	96	25.5
	Junior secondary (5-8)	50(13%)	43(12%)	93	25
	Secondary (9-10)	23(6%)	22(5%)	43	11
	Sinor secondary (11-12) and above	12(3%)	11(3%)	23	6
	Welayita	7(2%)	14(3%)	21	5
	Wealth status	Low	111(30%)	92(24%)	203
	Medium	44(11.5%)	44(11.5%)	88	23
	High	33(8.7%)	52(14%)	85	23

6 Scheme related characteristics of households and single most important reasons not to renewed CBHI membership

Households who did not renew their CBHI membership were asked to state their reasons why they drop out their CBHI membership. Out of 188 study participants 53(28%) of households said since scope of illness covered by the scheme is limited we still pay other additional costs for the treatment.

The contracted health center has limited health care services most of the time have no drug in the pharmacy and unfunctional laboratory instruments; so members are ordered to private clinic without reimbursement. (In-depth interviewee man kebele manager, age- 40).

39(20.8%) of study participants said that we dropout because the contracted health facility is far away from our home.

CBHI members whose home is far from the contracted health facility incurred for additional cost of transportation. Especially those members whose home is near to Yirgalem hospital have no interest to renew because the contracted health facility is Yirgalem health center if the case is beyond the health center they may be refers to Yirgalem hospital. But members whose home is near to Yirgalem hospital but far from Yirgalem health center wants directly to go Yirgalem hospital without reference system which is impossible with the rule and regulations of CBHI. That is why households whose home is near to Yirgalem hospital became dropout from the scheme. (in-depth interviewee woman CBHI office worker, age- 40)

37(19%) of households said that because of time and frequency contribution is not optimum to me, *Both the poor and the rich contribute the same amount in premium .One of the challenges to renew was time and frequency of contribution. the time of premium payment is collapsed with the start of school of their children so members have incurred for additional expenditures to buy school materials for their children; and also it is around holiday celebration time especially the poor were unwilling to renew because they cannot afford it easily.(in-depth interviewee man kebele manager , age- 65).*

30 (16.8%) of study participants were because of community based health insurance (CBHI) contribution premium is expensive for me.

Payment to CBHI scheme was 126 ETB per year when the scheme starts but this payment increases to 300 ETB per year because of the CBHI income and its expenditure is not balanced as the scheme said and now members have to pay 250 ETB per year even if they did not use any service at that time the increment of the premium forced the members to discontinue the program. (In-depth interviewee woman scheme officer, age- 28).

29(15.4%) of study participants were because of the health facility contracted do not give proper health care service.

In yirgalem town there is only one government health center s and its population is around 7760083which is beyond its capacity ,always crowded by the patients and give low quality of health care services. Because of low health care services members do not renewed membership card. (In-depth interviewee man CBHI scheme officer, age- 35).

In the contracted health facility CBHI members are not treated equal as non members were especially in pharmacy room if members of CBHI and non member of CBHI come to buy drug on the same time; non member will get the service first because they pay directly from out of pocket; and the members think as health professionals have negative attitude for us because we are not pay directly from out of pocket and they discontinued CBHI program. (In-depth interviewee man kebele manager, age- 65)

Table 4: Scheme related and single reasons not to renewed CBHI membership

Single Reason for not renewed membership	Frequency	Percent
CBHI premium is expensive for me	30	16.8
The health facility contracted do not give proper /sufficient health care service	29	15.4
Since Scope of illness covered by the scheme is limited we still pay other additional costs for the treatment	53	28
Since the contracted health facility is far away from our home	39	20.8
Time and frequency contribution is not optimum to me	37	19
Total	188	100

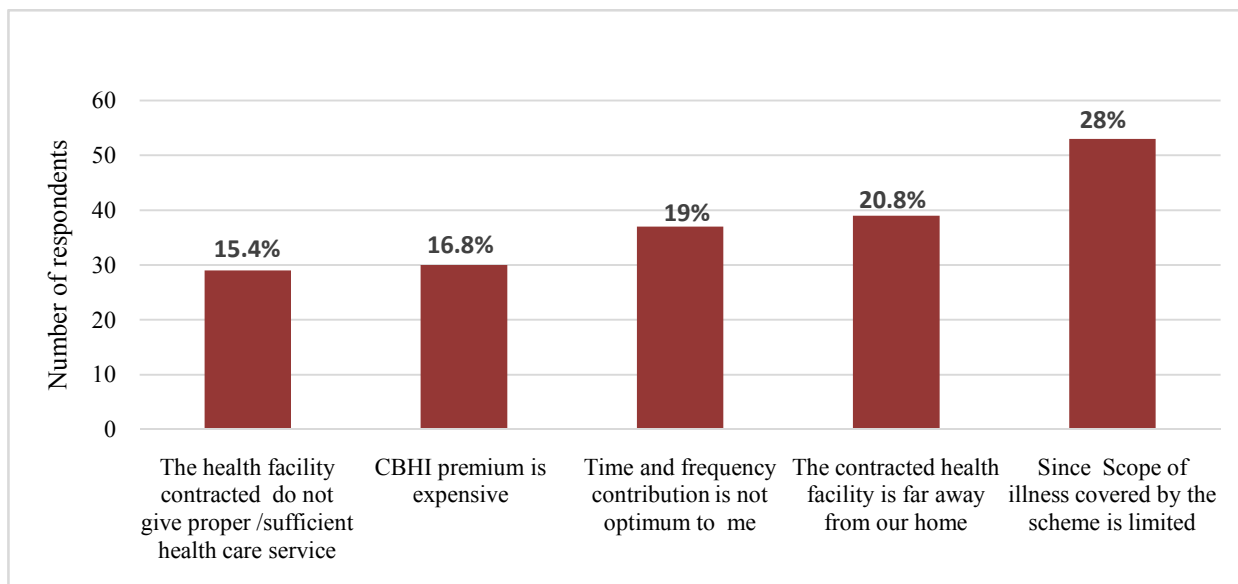


Figure 2: Reasons contributed to not to renewed CBHI membership

6.1 Single most important reasons for renewing CBHI membership

Concerning reasons why households renewed their membership for this year out of 188 study participants 69 (36.7%) of them were to protect their family from unexpected catastrophic health expenditure, 39 (20%) of households said the amount of CBHI contribution is cheaper than out of pocket payments to get health care services, 26 (14%) of study participants said because of perception of good quality of health care services, 23 (12%) of them since The benefit package of CBHI is good and I benefit from the scheme, 21(12%) of them said that at least one household member used health care service in this year and 10 (6%) in order to use modern health care services.

Table 5 Reasons for renew membership

Single Reason for renewing membership	frequency	Percent
To use modern health care services	10	6
At least one household member used health care service	21	12
Perception of good quality of health care	26	14

The amount of CBHI contribution is cheaper than out of pocket payments to get health care services	39	20
To protect my family from an expected catastrophic health expenditure	69	36.7
The benefit package of CBHI is good and I benefit from the scheme	23	12
Total	188	100

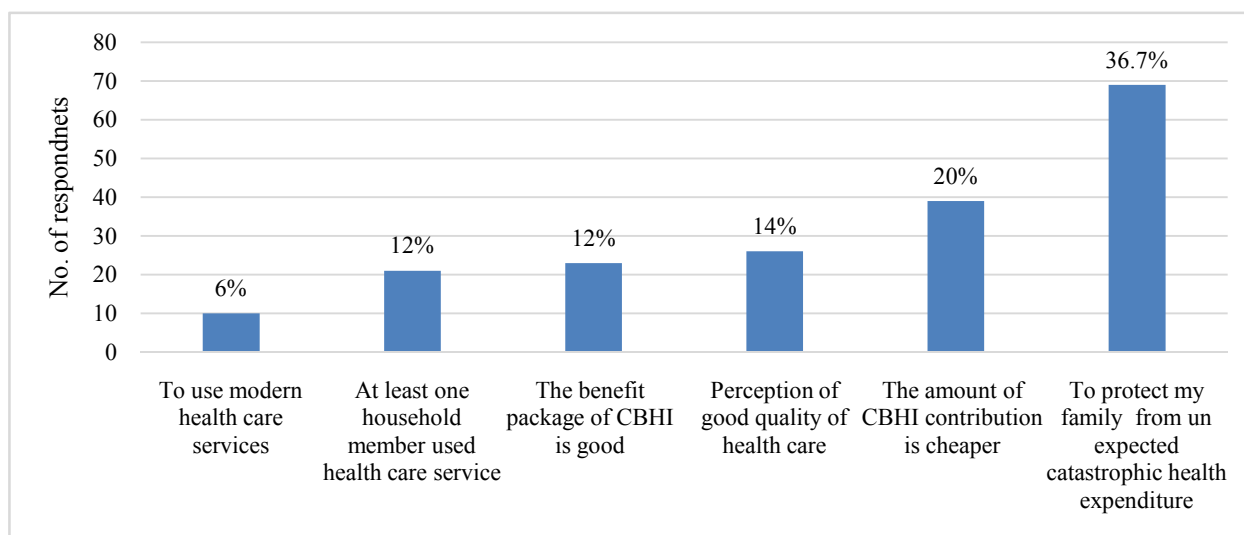


Figure 3: Reasons contributed for renewing CBHI membership

6.2 Bivariate analysis

The result of bivariate analyses of socio-demographic variables in binary logistic regression showed that age, educational status, wealth status of respondents, types of occupations and years of enrollment were found to be significantly associated with drop out of CBHI.

The result of bivariate analysis revealed that dropout of households with age group 24-49 was similar with /no difference/ renewal of households with the same age group. COR = 1.00; 95% CI (1.00, 1.00).

Educational status had association with dropout of CBHI membership. Illiterate households were 1.7 times more likely to dropout from CBHI than sinor secondary (11-12) and above, COR= 1.7; 95% CI (0.365, 1.00).

Occupations of households have association with dropout of CBHI. Dropout of merchant households were 2.8 times more likely than farmer households, COR= 2.8; 95% CI (1.4,-5.6).

Households' wealth status has association with dropout of CBHI. Households with wealth status of low income were 2 times less likely to drop out from CBHI than those medium wealth statuses, COR= 2.02; 95% CI (1.17, 3.50). While households with higher income group were 1.96 times more likely to drop out than those middle income groups, COR = 1.96; 95% CI (1.04, 3.69).

Time of enrollments have association with dropout. Those households who were enrolled for 1-3 years were 1.3 times more likely to drop out their CBHI membership than those members enrolled for 3-7 years, COR= 1.3; 95%CI (1.07, 1.45).

Table 6: Bivariate analysis of dropout of community based health insurance

Independent variables	Category	Dropout		Crude OR(95%CI)	P-value
		No	Yes		
Sex	Male	42(11.1%)	41(10.9%)	1.00	1.00
	Female	147(38.8%)	148(39%)	1.35(0.724,2.53)	0.455
Age	24-49	116(31%)	109(29%)	1.0(1.00,1.00) **	0.047
	≥50	72(19%)	79(21%)	1.00	1.00
Education	Illiterate	10(3%)	40(11.5%)	1.3(0.365, 1.00) **	0.02
	Read and write only	37(8.85%)	32(8.5%)	1.060(0.617,1.819)	.180
	Elementary (1-4)	56(14.5%)	40(11.5%)	0.381(0.038,3.78)	.873
	Junior secondary (5-8)	50(13%)	43(12%)	1.506(0.871,2.606)	.469
	Secondary (9-10)	23(6%)	22(5%)	1.619(0.704,3.722)	0.667
	Sinor secondary (11-12) and above	12(3%)	11(3%)	1.00	1.00
Marital status	Single	7(1.5%)	2(0.5%)	0.833(0.186,3.73)	0.756

	Married	170(45%)	179(48.4%)	2.085(0.983, 4.42)	0.899
	Divorced/separated	4(1%)	2(0.6%)	0.870(0.293, 2.58)	0.657
	Widower/widowed	7(1.9)	5(1.1%)	1.00	1.00
Occupation	Farmer	12(3.2%)	18(3.8%)	1.00	1.00
	Petty trader	27(7.2%)	4(1.8%)	1.2(0.55,2.65)	0.188
	Daily labour	56(15%)	57(15%)	1.9(1.431,4.60)	0.123
	Merchant	55(14.5%)	73(19.5%)	2.8(1.4,-5.6) **	0.022
	Others	38(10.3%)	36(9.85%)	0.56(0.592,0.836)	0.345
	Family size	≤ 5	113(30%)	107(28.5%)	1.00
>5		75(20%)	81(21%)	1.06(0.938,1.19)	0.34
Wealth status	Low	111(30%)	92(24%)	2.03(1.17,3.50) **	0.022
	Medium	44(11.5%)	44(11.5%)	1.00	1.00
	High	33(8.7%)	52(14%)	1.96(1.04,3.69) **	0.02
Year of enrolled	1-3	93(25%)	113(30%)	1.25(1.08,1.45) **	0.01
	3-7	95(25)	75(20%)	1.00	

6.3 Multivariate analysis

In the multivariate logistic regression analysis associated variables was performed to identify independent predictors' for drop out of CBHI. Educational status of respondents, wealth status, types of occupations and years of enrollment were factors affecting drop out of CBHI. Educational statuses of respondents were found to be an associated factor of drop out CBHI. Households who are illiterate were 1.73 times more likely to drop out of CBHI than those who were sinor and above, AOR = 1.73, 95% CI (0.365, 0.566).

Dropout of merchant households were 2.6 times more likely than farmer households, AOR = 2.6; 95% CI (1.7,3.5) Households with wealth status of low income were 2.5 times less likely to drop out from the CBHI than those medium wealth statuses, AOR = 2.5; 95% CI (1.89,3.40). And also households with higher income group were 1.58 times more likely to drop out than those middle income groups, AOR = 1.58; 95% CI (2.04, 4.89).

Those households who were enrolled for 1-3 years were 1.9 times more likely to drop out their CBHI membership than those members enrolled for 3-7 years, AOR = 1.9; 95%CI (1.29,3.44)

Table 7: Multivariate analysis of dropout of CBHI

Independent variables	Category	Dropout		Crude OR(95%CI)	P-value
		No	Yes		
Education	Illiterate	10(3%)	40(11.5%)	1.73(0.365, 0.566)	0.01
	Read and write only	37(8.85%)	32(8.5%)	.675(0.818,2.819)	.360
	Elementary (1-4)	56(14.5%)	40(11.5%)	0.381(0.038,3.78)	.523
	Junior secondary (5-8)	50(13%)	43(12%)	.506(0.671,3.806)	.444
	Secondary (9-10)	23(6%)	22(5%)	1.32(0.904,5.22)	0.767
	Sinor secondary (11-12) and above	12(3%)	11(3%)	1.00	0.336
Occupation	Farmer	12(3.2%)	18(3.8%)	1.4(1.561,2.10)	0.344
	Petty trader	27(7.2%)	4(1.8%)	2.1(0.577,1.65)	0.238
	Daily labour	56(15%)	57(15%)	1.00	0.546

	Merchant	55(14.5%)	73(19.5%)	2.6(1.4,-5.6) **	0.01
	Others	38(10.3%)	36(9.85%)	0.56(0.592,0.836)	0.345
Wealth status	Low	111(30%)	92(24%)	2.5(1.89,3.40) **	0.00
	Medium	44(11.5%)	44(11.5%)	1.00	1.00
	High	33(8.7%)	52(14%)	1.58(2.04,4.89) **	0.01
Year of enrolled	1-3	93(25%)	113(30%)	1.9(1.29,3.44) **	0.00
	3-7	95(25)	75(20%)	1.00	

6.4 Analysis of Pearson correlation of dropout of CBHI with scheme related characteristics

To examine relationship between dropout of CBHI and scheme related characteristics such as limited scope of illness covered by the scheme ,distance from health facility, un optimum time and frequency contribution, quality of health care service Pearson correlation was employed. As a result, the test statistics showed that there is statistically significant slightly weak positive relationship between dropout of CBHI and those variables. Limited scope of illness covered by CBHI scheme is one challenge in CBHI because members will pay other additional payment for treatments. Limited scope of illness covered by the scheme is positively correlated with members to drop out from their membership ($r=0.474$ at $p=0.00$). Similarly, to drop out from CBHI, households consider distance of health institution from their home. As distance of health institution from home increases, people opened for additional transportation and other health related costs like bedroom and food, then increase their interest of drop out from the program. There is slightly weak positive relationship between distance and drop out from CBHI ($r=0.405$ at $p=0.00$). Additionally, for CBHI members time of premium contribution and frequency contribution is important factor either to renew or dropout from CBHI. There is also slightly weak positive relationship between dropout of CBHI and un-optimum time and frequency($r=0.294$ at $p=0.00$). Finally members will perceive proper health care service with pre payment they pay. But they may get improper health care service i.e long waiting time, no drug in the pharmacy, no functional laboratory instruments in the contracted health institution.

Improper health care service forced members to drop out from CBHI, there is also slightly weak positive relationship between dropout of CBHI and quality of health care services ($r=0.289$ at $p=0.00$)

Table 8: Analysis of Pearson correlation between dropout of CBHI and scheme related variables

Scheme related characteristics		Dropout of CBHI	
Reasons to dropout	Frequency & percentage	Test statistics	Significances at $p \leq 0.05$
Scope of illness covered by the scheme is limited	53(28%)	Pearson correlation	0.00
Distance health facility	39(20.8%)	Pearson correlation	0.00
Un –optimum time and frequency contribution	37(19%)	Pearson correlation	0.00
Improper health care service	29(15.4)	Pearson correlation	0.00

7 Discussions

This study tried to identify reasons and factors affecting drop out of CBHI membership in Yiregalem town 2018. Series of studies conducted Burkina Fas shows that factors resulting in high dropout rate are similar to those resulting in low enrollment (25). Educational statuses of respondents were found to be an associated factor of either to drop out of CBHI. Households who are illiterate were 1.73 times more likely to drop out from CBHI than those who were sinor and above, AOR = 1.73, 95% CI (0.365, 0.566). The finding of this study is comparable with studies conducted in Nouna, Burkina Faso where the households in dropout group had a significantly lower education than non drop out group(25).

Socio economic statuses affect households to dropout from CBHI. People get more power to define and use different alternatives if his income is high. If people have enough money or income, they are not interested to renew their membership from the fact that they have the power and resistance for any occurrence of health shock in the future. Households who were renewed indicate that they are not quite sure about the future and want to protect themselves from unexpected occurrence of health shock at any time. This study found that, households with wealth status of low income were 2.5 times less likely to drop out from the CBHI than those medium wealth statuses, AOR = 2.5; 95% CI (1.89,3.40). While households with higher income group were 1.58 times more likely to drop out than those middle income groups, AOR = 1.58; 95% CI (2.04, 4.89). The finding of this study is comparable with studies conducted in Nigeria where wealthy households were less likely to enroll than less wealthy households. But opposite result was conducted in Tanzania (8, 26).

Occupations' of households have associations with dropout of CBHI. Most of the time merchant households are urban dwellers. Dropout of merchant households were 2.6 times more likely than farmer households, AOR = 2.6; 95% CI (1.7, 3.5). The finding of this study is comparable with studies conducted in Burkina Faso and Gahna where urban dwellers were less likely to join (25, 32).

The finding of this study also revealed that one of the reasons for drop out of CBHI were scope of illness covered by the scheme is limited and members are incurred for additional expenditure for treatment.

Limited scope of illness covered by CBHI scheme is one challenge in CBHI because members will pay other additional payment for treatments. Limited scope of illness covered by the scheme is positively correlated with members to drop out from their membership ($r=0.474$ at $p=0.00$).

The finding of this study is comparable with studies conducted in India, where limited benefit package were the primary reasons for dropping out of CBHI (17)

Distance from health institution is one of the reasons and is correlated with dropout of CBHI. As distance of health institution from home increases, people opened for additional transportation and other health related costs like bedroom and food, then increase their interest of drop out from the program. There is slightly weak positive relationship between distance and drop out from CBHI ($r=0.405$ at $p=0.00$). The finding of this study is comparable with studies conducted in Nigeria and Burkina Faso but opposite result seen in India where the nearest household were dropped out than the far (17, 25, 26).

Moreover, the time scheduled by CBHI committee members and the frequency of premium collection were one of the reason to dropout of CBHI. Respondents reported that it is not convenient to settle the payment on time. This situation forced them to drop out their membership. There is also slightly weak positive relationship between dropout of CBHI and un-optimum time and frequency ($r=0.294$ at $p=0.00$). The finding of this study was also comparable with studies conducted in Tanzania, Ghana, Bangladesh, and China (8, 13, 20).

The findings of this study also showed that community based health insurance contribution premium is expensive cannot be affordable and is reason for drop out of CBHI. 30(16%) of households dropout because of un-affordable of premium; The finding of this study is comparable with studies conducted with studies conducted in Ghana shows that 64% of communities are un-insured because they did not afford the premium. the study is comparable with studies conducted in Ethiopia, Tanzania and Bangladesh (8, 11).

Additionally, one of the main reasons for dropout of CBHI is quality of health care service. 29 (1.4%) of study participants reported because of quality of services for CBHI members were not as good as out of pocket paying patient and there were limited availability of drugs in the pharmacy and no functional laboratory instruments in the contracted health institution and long waiting time, there is also slightly weak positive relationship between dropout of CBHI and quality of health care services ($r=0.289$ at $p=0.00$). The finding of this study is comparable with studies conducted in Ethiopia, Burkina Faso, Guinea-Conakry, Senegal where poor health care quality increasing the dropout from the scheme (16, 19, 25)

8 Strengths and limitations

8.1 Strengths

- Two days training was given for the data collectors.
- Pretest were performed for 30 households that increases the study's validity and reliability
- The study subjects were selected using systematic random sampling technique help to avoid selection bias.
- The mixed method (quantitative and qualitative) data collection enables us to have better information.

8.2 Limitations

- Because of systematic sampling over or under representation may occur
- Since based on estimation, determination of household income may lack accuracy
- The factors expected to influence dropout of community based health insurance was may not be exhaustive. There could be other influencing factors which this study did not reveal

9 Conclusions

The study was conducted to assess factor affecting drop out of community based health insurance. The findings of the study indicated that, factor affecting drop out of community based health insurance were level of education, socio economic status of households, types of occupation and years of enrollment.

In this study the reasons that induce CBHI members to drop out their membership were mainly due to the narrowness of the scope of illness covered by the scheme followed by the contracted health facilities that will provide treatment are very far from the place where respondents were living. Moreover, the time scheduled by CBHI committee members and the frequency of premium collection were not convenient and because of these members could not settle their payment on time. Others also drop out their membership because they contracted health institution do not give proper health care service. This situation forced them to drop out their membership and also these reasons were correlated with dropout of CBHI.

On the other hand, CBHI members were encouraged to renew their membership mainly to avoid any potential catastrophic health expenditure because the premium they paid for CBHI is much lower than the expected health care expenditure.

10 Recommendations

Regional Health Bureau, Zonal and woreda health office should work to improve quality of health care service, availability of drugs, functionality of laboratory instruments and reduced waiting time for clients to reduce dropout and so as to attract new and more members in community based health insurance scheme. If there is no drug and laboratory service in Yirgalem health center they should refer to Yirgalem hospital rather than private clinics; unless their payment should be reimbursed.

The population growth of the town is high so one health center is not enough to meet the requirements of the members so it's important to construct additional government health centers. And also it is important to construct public pharmacy in the town because drug payment from public pharmacy is cheaper than private pharmacy

Health sector of the town and managers of Yirgalem as well as stake holders of CBHI should work together based on the rule and regulation of CBHI and should answer the question of the members.

The premium payment time schedule should different from starting year of school and the premium is paid twice a year. And referral linkage with hospital should need much improvement

And finally CBHI committee members and other stakeholders should work moreover; these committee members should try to do a lot to encourage members to extend their enrollment as the more they enrolled for more years, the probability to drop out will decline.

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Annexes

Annex 1 Consent form English version

Information sheet and consent form for assessment of reasons for drop out of HHs from CBHI in yirgalem town SNNP regional state, Ethiopia.

Contact person:

Name	Cell Phone	Email
1. Yitayish worku	+251913370434	yitayshhe2016@gmail.com

Name of organization: Addis Ababa University College of Health Sciences school of Public Health

Information sheet and consent form prepared to determine why enrolled HHs dropout of CBHI.

Introduction: First of all I would like to introduce myself. I am.....and collecting data/interviewing you for determining factors for drop out of HHs from CBHI. An investigator is from Addis Ababa University College of Health Sciences, School of Public Health.

Purpose of the study: to identify what are the main factors to CBHI drop out in yirgalem town.

Significant of the study: CBHI is an instrument in achieving universal health coverage and to reduce the impact of catastrophic health expenditure than out of pocket health expenditure.

The findings of this study will provide input to policy makers to design appropriate policy, and helps local administration to take action by formulating strategies to address the problem of dropout of CBHI in yirgalem town.

Procedure: Data will be collected using predesigned questioners for assess. The sample will be collected face to face interviewing at house hold level. Data will be collected and submitted to the investigator daily. It is not necessary to write the name of respondents instead we use code.

The right to refuse and withdraw: Participant has full right to refuse from participation or withdraw from the study at any time they want in this study, without losing any of their right.

If you volunteer, I am going to ask you some questions about yourself. I kindly request you to answer the following questions. May I continue? Yes or No

Consent form I have been briefly informed about the study and clearly understood the objective of the study. So I here approve my consent with my signature to take part in the study.

Name of the respondent _____ Signature _____ Date _____

Risk and discomfort: No any known risk and discomfort associated with the study.

Benefits: there is no any benefit due to participating in this study.

Incentive: the participants will not be provided by any incentive to take part in this study

Annex2. Questionnaire for quantitative studies English version

Addis Ababa University College of health sciences, School of Public Health

Questioners to determine factors of CBHI dropout in yirgalem town, SNNP Regional state, Ethiopia 2017.

Questionnaire Code _____ Kebele _____ Got/Area Name _____

Date of interview DD _____ /mm _____ /2017

Name of data collector _____

Name of Supervisor _____ signature _____

Code	Questions	Responses	Skip to
SECTION I:DEMOGRAPHIC SOCIOECONOMIC SECTION			
101	Sex	1. Male _____ <input type="checkbox"/> 2. Female _____ <input type="checkbox"/>	
102	How old are you	_____ years	
103	What is your educational status?	1. Illiterate _____ <input type="checkbox"/> 2. Read and write only _____ <input type="checkbox"/> 3. Elementary _____ <input type="checkbox"/> 4. Junior secondary(5-8) _____ <input type="checkbox"/> 5. Secondary (9-10) _____ <input type="checkbox"/> 6. Sinor secondary (11-12) _____ <input type="checkbox"/> 7. Diploma and above _____ <input type="checkbox"/> 99. Other specify _____ <input type="checkbox"/>	

104	What is your religion?	1. Orthodox _____ <input type="checkbox"/> 2. Protestant _____ <input type="checkbox"/> 3. Catholic _____ <input type="checkbox"/> 4. Muslim _____ <input type="checkbox"/> 99. Other specify _____ <input type="checkbox"/>	
105	To which ethnic group do you belong?	1. Sidama _____ <input type="checkbox"/> 2. Amhara _____ <input type="checkbox"/> 3. Guragie _____ <input type="checkbox"/>	
		4. Oromo _____ <input type="checkbox"/> 5. Selita _____ <input type="checkbox"/> 6. Welayita _____ <input type="checkbox"/> 99. Other _____ specify _____	
106	What is your current marital status?	1. Single _____ <input type="checkbox"/> 2. Married _____ <input type="checkbox"/> 3. Divorced _____ <input type="checkbox"/> 4. Windower/windowed _____ <input type="checkbox"/>	
107	What is your occupation?	1. Farmer _____ <input type="checkbox"/> 2. Petty trader _____ <input type="checkbox"/> 3. Daily labour _____ <input type="checkbox"/> 4. House wife _____ <input type="checkbox"/> 5. Government office employee _____ <input type="checkbox"/> 6. Employee of private business organizations _____ <input type="checkbox"/> 7. Merchant _____ <input type="checkbox"/> 99. Other specify _____	
108	Family size of the respondent	_____ in no	
109	What is your total income per month from different	_____ birr	

	sources?		
110	How many of these animal & coffee do you own?	1. Milk cows oxen or bulls _____ 2. Sheep _____ 3. Chickens _____ 4. Horse _____ 5. Donkey _____ 6. Mule _____ 7. Coffee _____ 99. Other specify _____	
201	When you started enrolling CBHI?	_____ years	
202	Have you renewed your CBHI membership for this year?	1. Yes _____ <input type="checkbox"/> 2. No _____ <input type="checkbox"/>	If your answer is no skip to Q no 204

203	If you renew membership what was the reason?	<ol style="list-style-type: none"> 1. To use modern health care service _____ <input type="checkbox"/> 2. At least one household member used health care service _____ <input type="checkbox"/> 3. Perception of good quality of health care service _____ <input type="checkbox"/> 4. Premium payment is cheaper than out of pocket payments to get health care service _____ <input type="checkbox"/> 5. To protect my family from an expected catastrophic health care expenditure _____ <input type="checkbox"/> 6. Due to pressure /advocacy from CBHI/government office _____ <input type="checkbox"/> 7. Confidence in the management of CBHI _____ <input type="checkbox"/> 8. The benefit package of CBHI is good and I benefit from the scheme _____ <input type="checkbox"/> 9. Large dependents (more children that need health care) _____ <input type="checkbox"/> 10. Time and frequency of contribution is good for me _____ <input type="checkbox"/> 99. Other specify _____ 	
204	If you do not renew your membership for this year, what was the reason?	<ol style="list-style-type: none"> 1. CBHI premium is expensive for me _____ <input type="checkbox"/> 	

		<p>2. Lack of informaion about renewal process _____ <input type="checkbox"/></p> <p>3. The health facility contracted do not give proper/sufficient health care service _____ <input type="checkbox"/></p> <p>4. Since I am the members of community based organizaiton (CBO)that will cover me and my family health expenditure and I do not need CBHI _____ <input type="checkbox"/></p> <p>5. I have small family size _____ <input type="checkbox"/></p> <p>6. Sithe scope of illness covered by the scheme is limited we still pay other additional costs for the treatment _____ <input type="checkbox"/></p> <p>7. Since the contracted health facility far away from home _____ <input type="checkbox"/></p> <p>8. CBHI committee members are not trust worthy _____ <input type="checkbox"/></p> <p>9. Time and frequency contribution is not optimum to me _____ <input type="checkbox"/></p> <p>10. We use traditional medicine _____ <input type="checkbox"/></p> <p>11. Money aside for health care may be percived as attracting disease _____ <input type="checkbox"/></p> <p>12. When some one becomes sick they ask the community to contribute finacially to healp aperson _____ <input type="checkbox"/></p> <p>99. Other specify _____</p>	
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Annex 3 Interview guide in English form

Dear informants the aim of this interview is to collect data for the study entitled why do households dropout of community based health insurance in yirgalem town of south nation's nationalities and people of Ethiopia. Generally this interview is formulated to determine effects of socio economic and effects of perceived benefit package on dropout of community based health insurance. Trust that the information you will honorably provide is strictly confidential and serve for academic purpose. This study is indispensable in providing information about why households drop out of community based health insurance in yirgalem town. To this end, your participation and genuine response to the questions is invaluable to the success of the study. No need of writing your name or any personal identification. Thus, I kindly ask your cooperation in responding the responses truthfully.

1. In-depth Interview Guide Developed to Collect Data from CBHI scheme officers

Starting time (hh-mm) _____ / _____

Termination time (hh-mm)) _____ / _____

Annex 4 In -depth interviewee questionnaire in English form

Date: ----- Interviewer: -----Position: -----
Interviewee: ----- Education status: ----- Duration of interview: -----
-----Telephone: ----- Place: -----Woreda& Name of Kebele: --
-----Time of interview: -----

In-depth interview questions

1. Can you tell me about the current status of CBHI groups? How many were last and before last year?

2. How is the trend of membership enrollment? Do new members enrollment increased or decreased? What were the possible reasons?

3. How many members drop out or discontinue since the last three years? What were their major and common reasons? What measures your organization took?

4. Do you think that income of household affect renewal in your kebele? And why?

5. When collection of premium is takes place (Timing of colleting the premium)?

6. Do you think that family size of household and age affect renewal of membership in your kebele? And why?

7. Do you think that health care service given for members and non members of CBHI is similar? if not why?

8. Do you think that the CBHI benefit package meets the requirement of your community?

9. What are the major socioeconomic and demographic as well as the perceived benefit package that affect renewal in your kebele?

Supply side (From your office side)

Demand side (From member’s or household’s side)

10. What strategies/ method’s you are using in order to handle the above listed problems?

11. What motivates households to renew their membership in general in your kebele?

12. What is the level of dropping rate of the household's from the program in your kebele? & what is the immediate reason for it?

13. What activity is performed by your office in order to reduce even to stop the dropping rate of the member?

Annex5 Information sheet and consent form in Amharic version

በአዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ የማህበረሰብ ትምህርት ት/ቤት ለተሳተፊዎች የሚነገር አጭር መረጃ

ትዕዛዝ

ጤና ይስጥልኝ እኔ ወ/ሮ ይታይሽ ወርቁ እባለሁ። በአዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ የጥናት ቡድን አባል ነኝ። የጥናት ቡድን አባል ነኝ የጥናት ቡድን አባል ነኝ። የዚህ ጥናት አላማ በማህበረሰብ አቀፍ ጤና መድሀን ተቋም በታቀፉት ላይ በይርጋለም ከተማ ውስጥ ባሉ ቀበሌዎች በሳይንሳዊ ዘዴ በተመረጡ ቀበሌዎችና እማወራ እና አባወራዎች ያገልግሎት መታወቂያቸውን የማያሳድሱበት ምክንያቶች ለማወቅ እና መፍትሄ ለመጠቀም የተዘጋጀ መጠይቅ ነው። እኔ መረጃውን ከሚሠበስቡት ሰዎች መሃል አንዷ ስሆን በማህበረሰብ አቀፍ ጤና መድሀን ተቋም በታቀፉት አባላት ላይ የአባልነት መታወቂያቸውን በማሳደስ እና በማያሳድሱት ላይ ያሉ ክፍተቶችን ለመለየት በተመለከተ የተዘጋጁ ጥያቄዎችን እጠይቆቻለሁ። የእርስዎ እዚህ ጥናት ውስጥ መሳተፍ በማህበረሰብ አቀፍ ጤና መድሀን ተቋም ቀጣይነት እንዲኖረው ጋር የተያያዙ ችግሮች እንድሻሻሉ ስለምረዳ እንደሚተባበሩን ተስፋ አደርጋለሁ።

በጥናቱ ላይ የሚሠተፉት በፍላጎትዎ ሲሆን በሙሉም ሆነ በከፊል ያለመሳተፍ መብትዎ የተጠበቀ ነው። በጥናቱ ላይ ያለመሳተፍ መብትዎ የተከበረና የሚሳተፉም ከሆነ ምስጥርዎ የማይባክን መሆኑን እርግጠኛ ይሆኑ። ቃለመጠይቁ 10 ደቂቃዎችን ያህል የሚወስድ ሲሆን በማንኛውም ጊዜ ማቆም ይችላሉ። እስካሁን በተነጋገርንባቸው ጉዳዎች ላይ ያልገባዎትና ግልጽ ያልሆነ ነገር ካለ መጠየቅ ይችላሉ። አዎን----- አይደለም----- አይደለም ከሆነ በማመስገን ወደ ቀጣዩ አባዎራ ወይም እማወራ ይሄዱ

የስምምነት ቅጽ

እኔ ስሜ ከዚህ በታች የተገለጸው ግለሰብ የጥናቱ አላማ በሰፊው የተነገረኝ እና የተረዳውት ሲሆን፣ የሚሰጠው መረጃ ሚስጥራዊነቱ ፈጽሞ የተጠበቀ እንደሚሆን ስለተረዳው በጥናቱ ላይ ለመሳተፍ በፍላጎቴ ተስማምቻለሁ።

መረጃውን የሰጠው ሰው ስም-----ፊርማ-----

መረጃውን የሰበሰበው ሰው ስም-----ፊርማ-----

መረጃው የተሰበሰበበት ቀን-----

Annex6 Amharic (local language) version questionnaire

በአዲስ አበባ ዩኒቨርሲቲ ጤና ሳይንስ ኮሌጅ የማህበራዊ ጥናት ክፍል በይርጋለም ከተማ ነዋሪ በሆኑ አባወራና እማወራዎች በአከባቢያቸው ባለው ማህበረሰብ አቀፍ ጤና መድን ተቋም ውስጥ ከታቀፉ በኋላ የአገልግሎት ካርዳቸውን የማያሳድሱበት ምክንያት ለማወቅ የተዘጋጀ መጠይቅ ነው።

መለያ ቁጥር-----ቀበሌ-----ጎጥ-----መረጃው የተሠበሠበበት ቀን---ወር-----2010ዓ.ም

መረጃውን የሰበሰበው ሰው ስምና ፊርማ -----

የሱፐርቫይዘር ስም እና ፊርማ -----

ተ.ቁ	ጥያቄ	መልስ	ወደ
ክፍል አንድ አጠቃላይ ዲሞግራፊ፣ ማህበራዊና ኢኮኖሚያዊ መረጃን የተመለከተ			
101	ፆታ	1. ወንድ _____ <input type="text"/> 2. ሴት _____ <input type="text"/>	
102	ዕድሜዎት ስንት ነው?	_____ ዓመት	
103	የትምህርት ደረጃዎት?	1. ያልተማረ _____ <input type="text"/> 2. መፃፍ እና ማንበብ ብቻ የሚችል _____ <input type="text"/> 3. አንደኛ ደረጃ (1-4) _____ <input type="text"/> 4. አንደኛና መለስተኛ ደረጃ (5-8) _____ <input type="text"/> 5. ሁለተኛ ደረጃ (9-10) _____ <input type="text"/> 6. ከፍተኛና ሁለተኛ ደረጃ (11-12) _____ <input type="text"/> 7. ዲፕሎማ እና ከዚያ በላይ _____ <input type="text"/> 99. ሌላ ካለ _____	
104	የየትኛውን እምነት ተከታይ ኖት?	1. ኦርቶዶክስ _____ <input type="text"/> 2. ፕሮቴስታንት _____ <input type="text"/> 3. ካቶሊክ _____ <input type="text"/> 4. ሙስሊም _____ <input type="text"/> 99. ሌላ ካለ _____ <input type="text"/>	

105	ከየትኛው ብሄር ይመደባሉ?	1. ሲዳማ _____ <input type="text"/> 2. አማራ _____ <input type="text"/> 3. ጉራጌ _____ <input type="text"/> 4. አሮሞ _____ <input type="text"/> 5. ስልጤ _____ <input type="text"/> 6. ወላይታ _____ <input type="text"/> 99. ሌላ ካለ _____ <input type="text"/>	
106	የትዳር ሁኔታ?	1. ያላገባ _____ <input type="text"/> 2. ያገባ _____ <input type="text"/> 3. ሚስት/ባልን የፈታ _____ <input type="text"/> 4. ሚስት/ባል የሞተበት _____ <input type="text"/>	
107	የመተዳደሪያ ስራዎች ምንድን ነው?	1. ገበሬ _____ <input type="text"/> 2. የጉሊት ነጋዴ/ቸርቻሪ _____ <input type="text"/> 3. የቀን ሠራተኛ _____ <input type="text"/> 4. የቤት እመቤት _____ <input type="text"/> 5. የመንግስት ሰራተኛ _____ <input type="text"/> 6. የግል ድርጅት ሰራተኛ _____ <input type="text"/> 7. ነጋዴ _____ <input type="text"/> 99. ሌላ ካለ ይጥቀሱ _____	
108	የቤተሰብ አባላት ስንት ናቸው?	_____ በቁጥር	
109	ወርሃዊ የቤተሰብ ገቢያቹ ስንት ነው?	_____ ብር	

110	ምን ያህል ንብረት አሎዎት?	1. በሬ እና ላሞች _____ 2. በጎች _____ 3. ዶሮዎች _____ 4. ፈረስ _____ 5. አህያ _____ 6. በቅሎ _____ 7. ቡና በእግር _____ 99. ሌላ ካለ ይጥቀሱ _____	
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ክፍል2 አጠቃላይ የማህበረሰብ አቀፍ ጤና መድን ተቋም መረጃን የተመለከተ

201	መቼ ነበር የማህበረሰብ አቀፍ የጤና መድን ተቋም አባል የነበሩት?	_____ ዓመት	
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202	የአባልነት መታወቂያዎትን በዚህ አመት አሳድሰዋል?	1. አዎ _____ <input type="checkbox"/> 2. አይደለም _____ <input type="checkbox"/>	መልሶዎት አይደለም ከሆነ ወደ ጥያቄ ቁ. 204
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203	የአባልነት መታወቂያዎትን ከዚህ ዓመት በፊት አሳድሰው ከሆነ ምክኒያቱ ምንድነው ብለው ያምናሉ?	1. ዘመናዊ ህክምናን ለመጠቀም <input type="checkbox"/> 2. ከቤተሰቤ ውስጥ ቢያንስ አንድ ሰው ጤና ተቋም ተጠቅሞ ስለነበረ _____ <input type="checkbox"/> 3. የውል ስምምነት የተደረገልን ጤና አገልግሎት ይሰጣል ብዬ ስለማስብ _____ <input type="checkbox"/> 4. የማህበረሰብ አቀፍ ጤና መድን ተቋም አርቦን ከኪስ ክፍያ ጋር ሲነፃፀር እርካሽ ስለሆነ _____ <input type="checkbox"/>	
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		<p>5. ቤተሰቦቼን ካልተጠበቀ ክፍተኛ የህክምና ወጪ ለማዳን__ <input type="checkbox"/></p> <p>6. የማህበረሰብ አቀፍ ጤና መድን ተቋም ሃላፊዎች ወይም የቀበሌ ስራ አስኪያጆች ስለሚያስገድዱን <input type="checkbox"/></p> <p>7. የማህበረሰብ አቀፍ ጤና መድን ተቋም ሰራተኞች ታማኝ ስለሆኑ እና እኔም ስለማምናቸው__ <input type="checkbox"/></p> <p>8. ከማህበረሰብ አቀፍ ጤና መድን ተቋም የማገኘው ጥቅም ጥሩ ስለሆነ እና እኔም ጥቅሙን ተጠቃሚ ስለሆንክ <input type="checkbox"/></p> <p>9. በቤተሰቤ ውስጥ ብዙ የጤና አገልግሎት የሚያስፈልጋቸውብዙ ልጆች ስላሉ__ <input type="checkbox"/></p> <p>10. የጤና መድን አርቦን አከፋፈል ሁኔታ ለኔ ምቹ ስለሆነ__ <input type="checkbox"/></p> <p>99. ሌላ ካለ ይጥቀሱ_____</p>	
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204	የአባልነት መታወቂያዎትን በዚህ አመት ካላደሱ ምክኒያቱ ምንድነው ብለው ያምናሉ?	<p>1. የጤና መድን አርቦን ውድ ስለሆነ _____ <input type="checkbox"/></p> <p>2. ስለ እድሳቱ መረጃ ስሌላኝ <input type="checkbox"/></p> <p>3. ውል ስምምነት የተደረገልን ጤና ተቋም ጥሩ አገልግሎት ስለማይሰጥ _____ <input type="checkbox"/></p> <p>4. የእኔና የቤተሰቤን የህክምና ወጭ የሚሸፍኑት የማህበረሰብ አቀፍ ተቋም (እንደ እድር፣ እቁብ...) ስለሆኑና እኔም የነሱ አባል ስለሆንኩኝ ማህበረሰብ አቀፍ ጤና መድን ተቋም አያስፈልገኝም <input type="checkbox"/></p> <p>5. የቤተሰብ ውስጥ ህክምና የሚያስፈልጋቸው ልጆችም ብዙ ስላልሆነ _____ <input type="checkbox"/></p> <p>6. በማህበረሰብ አቀፍ ጤና መድን ተቋም የሚሰጠው አገልግሎት ውስን ስለሆነ_ከቅድመ ክፍያው በተጨማሪ ሌላ የህክምና ተጨማሪ ወጪ ስለሚያሰጣ _____ <input type="checkbox"/></p> <p>7. የውል ስምምነት የተደረገልን የጤና ተቋም ከመኖሪያ ቤቱ ስለሚርቅ _____ <input type="checkbox"/></p>	
		<p>8. የማህበረሰብ አቀፍ ጤና መድን ተቋም ስራተኞች ስለማልተማመንባቸው _____ <input type="checkbox"/></p>	

		<p>9. የቅድመ ክፍያ ግዢና ሁኔታው ለኔ ምቹ ስላልሆነ _____ <input type="checkbox"/></p> <p>10. ባህላዊ ህክምና ስለምንጠቀም _____ <input type="checkbox"/></p> <p>11. ገና እታመማለሁ ብዬ ቅድመ ክፍያን መክፈል በሽታን እንደመጥራት ስለሚመስለኝ _____ <input type="checkbox"/></p> <p>12. እኔ ወይም ቤተሰቤ ብንታመም ማህበረሰቡ ገንዘብ በማዋጣት ስለሚያሳክመን _____ <input type="checkbox"/></p> <p>99. ሌላ ካለ ይጥቀሱ _____</p>	
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አመሰግናለሁ!

a. Annex 8 in-depth interviewee guide in Amharic form

ጤና ይስጥልኝ እኔ ወ/ሮ ይታይሽ ወርቁ እባለሁ። በአዲስ አበባ ዩኒቨርሲቲ የጤና ሳይንስ ኮሌጅ የጥናት ቡድን አባል ነኝ። የጥናት ቡድን አባል ነኝ የጥናት ቡድን አባል ነኝ።

ውድ የቃለ-መጠይቁ ተሳታፊዎች የቃለ-መጠይቁ ዓላማ በይርጋለም ከተማ የሚኖሩ እማ ወራና አባወራዎች በማህበረሰብ ዐቀፍ ጤና መድሀን ተቋም ከታቀፉ በኋላ የመገልገያ ካርዳቸውን እንዳያሳድሱ የሚያደርጋቸውን ነገሮች ለማወቅ ነው። የእርስዎ እዚህ ጥናት ውስጥ መሳተፍ በማህበረሰብ አቀፍ ጤና መድሀን ተቋም ቀጣይነት እንዲኖረው ጋር የተያያዙ ችግሮች እንድንሻሻሉ ስለምረዳ እንደሚተባበሩን ተስፋ አደርጋለሁ።

b. Annex 9 in-depth interview questioner Amharic form

ቀን -----
 የስራ ድርሻ -----
 የትምህርት ደረጃ -----
 ስልክ ቁጥር -----
 ወረዳ እና ቀበሌ -----

ጠያቂ -----
 ተጠያቂ -----
 መጠይቁ የወሰደው ጊዜ-----
 ቦታ -----
 ቃለመጠይቁ የተደረገበት ሰዓት -----

ዝርዝር መጠይቆች

1. በማህበረሰብ ዐቀፍ ጤና መድሀን ተቋም አባል ያሉበትን ሁኔታ ሲነግሩኝ ይችላሉ? አምናና ታች አምና በቁጥርስንትናቸው -
 ? _____

2. የአዲስ አበባት ምዝገባ ምን ይመስላል? እየጨመረ ነው ወይስ እየቀነሰ? ምክኒያቱስ ምድነው ብለው ያስባሉ? -

3. ባለፉት ሦስት ዓመታት ምን ያህል ዓባላት የመገልገያ ካርዳቸውን አላሳደሱም? ያላሳደሱበት ምክኒያትስ ምንድ ነው? በቢሮ ደረጃ ምን መፍትሄ ወስዳቸዋል?

4. በቀበሌያቹ ውስጥ ያሉ የማህበረሰብ አቀፍ ጤና መድሀን ተቋም አባል የሆኑት እማወራዎች እና አባወራዎች የመገልገያ መታወቂያ ለማሳደስ አማካኝ የወር ገቢያቸው ተጽኖ ይፈጥርባቸዋል ብለው ያስባሉ? አዎ ካሉ ለምን?

5. በቀበሌያቹ ውስጥ ያሉ የማህበረሰብ አቀፍ ጤና መድሀን ተቋም አባል የሆኑት እማወራዎች እና አባወራዎች የቅድመ ክፍያ መሰብሰቢያ ወቅት መቼ ነው? ጊዜና ሁኔታው ማሳደስ ላይ ተፅኖ አለው? ለምን?

6 የማህበረሰብ አቀፍ ጤና መድሀን ተቋም አባል የሆኑ ቀበሌ ነዋሪዎች የመገልገያ መታወቂያቸውን ለማደስ የቤተሰብ አባላት ቁጥር እና እድሜያቸው ተፅኖ ይፈጥራል?አዎ ካሉ ለምን ይመስላቸዋል ለምን?

7 የማህበረሰብ አቀፍ ጤና መድሀን ተቋም አባል ለሆኑ እና አባል ላልሆኑ በጤና ተቋም ውስጥ ተመሳሳይ አገልግሎት ያገኛሉ ብለህ ያስባሉ? ካልሆነስ ለምን ይመስላቸዋል?

8 የማህበረሰብ አቀፍ ጤና መድሀን ተቋም የሚሰጠው አገልግሎት የአባላቱን ፍላጎት አሟልቷል ብለው ያስባሉ ታስባለህ? ካልሆነስ ለምን?

9 በቀበሌያቹ የማህበረሰብ አቀፍ ጤና መድሀን ተቋም የታቀፉ ነዋሪዎች የመገልገያ መታወቂያቸውን ለማሳደስ ተፅኖ የሚያደርጉት ዋና ዋና ማህበራዊ፣ ኢኮኖሚያዊ እና ዲሞክራሲያዊ ችግሮች ምን ምን ናቸው? ዝርዝሩን ይጻፉ

10 ከላይ የተጠቀሱት ክፍተቶችን ለማስተካከል ምን አይነት ዘዴዎችን ተጠቅማቸዋል?

11 በቀበሌያቹ ውስጥ ያሉ የማህበረሰብ አቀፍ ጤና መድሀኒን ተቋም አባል የሆኑት እማወራዎች እና አባወራዎች የመገልገያ መታወቂያ ለማሳደስ የሚያነቃቃቸው ምንድን ናቸው ብለው ያስባሉ?

12 በቀበሌያቹ ውስጥ ያሉ የማህበረሰብ አቀፍ ጤና መድሀኒን ተቋም አባል የሆኑት የመገልገያ መታወቂያ ያለማሳደስ ፍጥነት ምን ያህል ነው ዋነኛ ምክንያቱስ ምንድን ነው?

13 ይህንን የመገልገያ መታወቂያ ያለማሳደስ ፍጥነት ለመቀነስ እና ለማቆም በናንተ በኩል ምን ስራዎች ተሰርተዋል?
