Health Services Utilization and Associated Factors: A Comparative Study among Beneficiaries and Non-Beneficiaries of Community Based Health Insurance in Gimbichu District, Eastern Shoa, Central Ethiopia

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Abstract

Background: *Accessibility and price have been among the most important factors that may cause low utilization of health services in Ethiopia and specifically in Ginbichu District despite high coverage of primary health care services. To achieve universal access, the government of Ethiopia has been piloting community based health insurance for three years and started to scale up recently in which Gimbichu is one of the pilots' woredas.*

Objective: *The main objective is to assess the level of utilization of health services and associated factors among beneficiaries and non-beneficiaries of CBHI in Gimbichu District, Central Ethiopia.*

Methods: *A community based comparative cross-sectional study design using both quantitative and qualitative methods of data collection was conducted from Sep16-Oct 25, 2013. A total of 900 household heads out of 916 candidates for survey and 18 in-depth interviews were included. Stratified sampling based on insured and non insured for the quantitative with proportional allocation of the households, and purposive sampling technique for the qualitative study were used in the randomly selected 5 kebeles. The primary quantitative data were coded and entered using Epi data v.3.1 and predictor variables at p <=0.25 was identified in bivariate analysis and employed in multivariate analysis at p < 0.05 in logestic regression using SPSS v. 20.0. The qualitative result was thematically analyzed and triangulated to the quantitative result. Ethical clearance was obtained from the Jimma University College of Public Health and Medical Sciences.*

Result: *There is a significant difference between the overall utilization level among beneficiaries and non beneficiaries of CBHI (p<.0001), 363 (81%) of the respondents of beneficiaries of CBHI had visited the health institutions, whereas it was only 285(63.1%) from non beneficiaries of CBHI for their previous history of illness in 12 months having 17.9 percentage point difference. The odds of utilizing health services were 3 and 2 times likely higher among higher quintiles of respondents' household wealth index (richest) compared to lower quintiles (poorest) from respondents of beneficiaries and non beneficiaries of CBHI {(AOR=3.066 , 95%CI: 1.463, 6.426,) &(AOR=2.276, 95%CI: 1.069, 4.846)} respectively. Having history of severe illness and perceived near distance were found to be some of positive predictos to utilize the health service among non beneficiaries CBHI.*

Conclusion: *Utilization level of health services was higher among beneficiaries of CBHI even though there were common predictor variables affecting the utilization of both beneficiaries and non beneficiaries. Thus, we recommend that the level of health service utilization can be improved by improving predictors of health care use like insurance status, household wealth status, access to health services.*

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Acronyms

AID	Acquired Immunodeficiency Syndrome
ANC	Anti Natal Care
BCBHI	Beneficiaries of Community Based Health Insurance
NBCBHI	Non Beneficiaries of Community Based Health Insurance
CBHI	Community Based Health Insurance
CBI	Community Based Insurance
EDHS	Ethiopian Demographic and Health Survey
EFY	Ethiopian Fiscal Year
HH	Households
HIV	Human Immunodeficiency Virus
HSDP III	Health Sector Development Plan Third
HSDP IV	Health Sector Development Plan Fourth
IMCI	Integrated Management Of Child Illnesses
MDG	Millennium Development Goals
SHI	Social Health Insurance
SPSS	Statistical Package for Social Science
SRS	Simple random sampling methods
WHO	World Health Organization

Chapter 1: Introduction

1.1. Background

Health services access, utilization, availability and coverage are often used interchangeably to reflect whether people are receiving the services they need. Health care access can be defined in a variety of ways, it refers to geographic availability, or a far broader definition identifies four dimensions of access: availability, accessibility, affordability, and acceptability. Some define access as the opportunity to use health care; others draw no distinction between access and use. Health service is use the number of visits to health facilities for per total population [1, 2].

Health care is one of the crucial components of basic social services that have a direct linkage to the growth and development of a country as well as to the economic welfare of a society as described in HSDP IV of Ethiopia [3]. As stated in the bulletin of WHO universal coverage of health care means that everyone in the population has access to promotive, preventive, curative and rehabilitative health services when they need it and at an affordable cost of financial risk protection.Many countries, at varying stages of economic development, have shown substantial progress towards universal coverage [4]. But no country has yet been able to guarantee everyone immediate access to all the health services. They all face resource constraints of one type or another although these are most critical in low-income countries. Removing the financial barriers implicit in direct-payment systems will help poorer people obtain care, but it will not guarantee it. Moreover, if services are not available at all or not available near by, people cannot use them even if they are free of charge. Ensuring comprehensive coverage of core services and minimizing financial and other barriers to access have proven effective in promoting equitable use of health services despite inequities in service use persist in some countries [5, 6].

The world as a whole still has a long way to go by focusing on the two key elements of universal health coverage: (i) Financial access to crucial health services; and (ii) the extent of financial risk protection provided to the people who use them [4]. Achievement of the goal of universal coverage is contingent on the underlying institutional design of the three health financing functions (collection, pooling and purchasing/provision) [7]. Although significant

progress has been accomplished in past decades, virtually all countries are under- utilizing the resources that are available to them. The impact of failures in the health systems of any country is most severe on the poor everywhere, who are driven deeper into poverty by lack of financial protection against ill- health. WHO proposes that it is better to make possible "pre-payments" system on health services as much as possible, whether in the form of insurance, taxes or social security [8].

There is growing international consensus that out-of-pocket payments are contrary to the goal of universal coverage, particularly given the ineffectiveness of fee waivers in providing financial protection to the poor. However, it is of concern that financing strategies (such as community based health insurance and private voluntary health insurance) that inevitably further fragment health systems are still being promoted as useful financing mechanisms for low- and middle-income countries [1,9].

In most African countries, health reforms have been implemented and decentralization has strengthened district-level capacity to manage health services. Participatory structures with community involvement have been created, and the concept of health care packages developed. Countries have achieved some results such as improvement in access to health services and in some health indicators such as life expectancy and under-five mortality. However, the socioeconomic environment such as the increasing poverty, the growing impact of the HIV/AIDS epidemic, increased burden of care on the health system, communities and households, has not been conducive to achieving great success in the people's health status [10]. Most of the countries in the African Region have not made sufficient progress towards the MDG targets. A number of key challenges and constraints need to be addressed effectively if countries are to attain the goals by 2015. These challenges include: inadequate internal and external resources devoted to the achievement of the MDGs; external resources which are unpredictable, non-sustainable, and not in harmony with country priorities; existing resources which are inefficiently utilized; weak health systems, particularly poor access to, and quality of health services [11].

Similarly in Ethiopia, major progresses have been made to improve the health status of the population and boosting the health service coverage in the last one and half decades but still in Ethiopia there are high rate of morbidity and mortality and the health status remains relatively

poor in the country. Looking at the health care financing mechanism in Ethiopia, one can easily observe high contribution of out of pocket payment by households. As per the fourth National Health Account study conducted in 2009/10, which was based on 2007/08 data, household out of pocket payments constituted about 37% of the total health expenditure which is regressive & impedes access to health services. In order to address this problem & create an equitable financing method, the government of Ethiopia is currently undertaking a number of activities to introduce different health insurance schemes with the overall objective of achieving universal access. Parallel to the work of social health insurance, Ethiopia has been piloting community-based health insurance (CBHI), which covers more than 83.6% of the population [3, 12].

CBHI is an important mechanism for increasing access to health care and providing financial protection against the cost of illness to low-income rural and informal sector workers who are currently excluded from any government financing mechanisms. Primarily reason to introduce subsidies in CBHI is to make it affordable for the poorer sections of the society. However, as found in this study, these subsidies can also increase adverse selection [13]

In Ginbichu district CBHI has been piloting since established on January 2011 and started covering service utilization on July 2011 as reported from the Woreda CBHI facilitating health office. The premium for the entire household is paid in one single installment, in the middle of the year, after the harvest which is 180Birr (≈$9.8) per year. Membership is renewed yearly. The benefit package includes all services available in primary health care, hospital, and referral level with the exception of tooth implantation, artificial organ implantation, cosmic surgery, correcting lenses, fighting, and car accident [14, 15].

In general utilization of quality health care services and financial risk protection of the people have been the challenging and unrelenting factors to achieve globally or nationally set objectives concerning the health of the community. Recently ensuring comprehensive coverage of core services and minimizing financial and other barriers to access have proven effective in promoting equitable use of health services despite the inequities in service use persist in some countries.

1.2. Statement of the problem

Worldwide, health systems are proving to be inadequate at meeting population needs. Millions of people all over the world suffer and die from conditions for which there exist effective interventions which are underutilized especially in the developing coutries, and income-related disparities in use are large. Multiple factors are responsible for the missed opportunities to realize major gains in the health of the population. On the demand side economic constraints, cultural and educational factors of the community may obscure the recognition of illness and the potential benefits of health services, which may suppress utilization, even if benefits are recognized. For example, in Bolivia, 60% of children who died during a study period were not taken for medical treatment during the fatal sickness episode as discussed by O'donnell [1, 4].

Health programs and systems should be evaluated against the objective whether individuals that can potentially benefit from effective health care do in fact receive it, through examination of the rate of utilization of effective health care among the population in need [1]. For instance, Sub-Saharan Africa has enjoyed a rapid decline in children under five years mortality of since the middle of the past decade, although there is still some considerable ground to cover for the low-income African countries to achieve the MDGs [16]. Malaria mortality, maternal mortality, and child mortality have fallen sharply as increased public spending on health has been put to good use by the low-income countries [17].

In most developing countries high priorities have been given to the development of basic health services or primary healthcare. But once the service is accessible, it still needs to be acceptable to the population; otherwise people may not come for it and may even seek alternative care. There are also recent gains in health status of the Ethiopian population in 2011/12, as measured mainly by declines in infant and under-five mortality rates and HIV prevalence rate reached, 59/1000, 88/1000 and 2.3%, respectively [12,17].

In Ethiopia primary health service coverage reached 96% in 2010/11 from 89% in 2009/10. Health services utilization in Ethiopia remains 0.3 per capita attendances (11). Concerning the trend over time, there were fluctuations in utilization of health services from 0.34 in EFY 1998(2006/7) to 0.25 in EFY 2000(2008/9) and 0.30 in EFY 2001(2009/10), a level of

performance which is about half of the target (0.66) set for the end of HSDP III. The low utilization of health service calls for better and more efficient utilization of resources at health facility level [18]. It would be difficult to ascribe the low level of health service utilization to decline in levels of morbidity. The most important factors affecting utilization of health facilities are accessibility and price. On the community perspective, cultural and societal norms, distances to functioning health centres and financial barriers were the major constraints in Ethiopia [3, 19].

There is strong evidence that the primary obstacles blocking fast and sustainable targeted health gains are lack of resources and weak implementation capacity. There is also low levels community utilization of some existing interventions despite their proven effectiveness, which implies the need for more work with communities to increase demand and timely utilization of available services at each level of the health care system [20].

To address these problems, CBHI in Ethiopia is on piloting in which Gimbichu district is one of them and is at the spot of scaling up using the lessons learned from the pilot [14, 15]. Community based health insurance which is on piloting in the Ginbichu District but the out put or the probable factors related to the implementation are not known. Determining the level of utilization of health care services and associated factors helps to determine the effect of CBHI. There are no justifiable data that show utilization of health care services and associated factors related comparing beneficiaries and non beneficiaries of CBHI in the area.

Chapter 2: Literature Review

2.1 Utilization of health service and associated factors

Multiple staff described in Ethiopian cultural norms exists that did not promote use of formal health services, in some communities [21].The findings of determinants of conventional health service utilization among pastoralists in northeast Ethiopia have revealed the decline in utilization of modern health services with distance in the area, as well as significantly lower utilization of these services among mobile pastoralist communities as compared to settled ones [22]. Study in Jimma, Ethiopia shows regarding the utilization of health services, 48.7% of the respondents had visited any type of health care facility including the traditional medicine and only 53.7% visited to a modern health institution in the last episode of illness in the previous 12 months [23].

Factors affecting health services utilization

Some forces encourage more utilization of healthcare; others deter it. For example, increases in the prevalence of chronic disease, consumer preferences, new therapeutic technologies, aging, provider practice patterns, the total number of people, or percentage of the population who can receive the service and ability to pay are some factors affecting the overall health care utilization [12]**.**

In their most recent explication of the model, Andersen & Davidson described three major components of health care utilization (predisposing, enabling, and need) determinants as follows:

Predisposing factors: Predisposing factors include the propensity to seek care, such as; individual factors include the social-demographic characteristics of age and sex, social factors such as education, occupation and ethnicity [24]. Among the predisposing factors, demographic charecterestics such as age and gender represent biological imperatives suggestingthe the likelihood the people will need health services.health beliefs attitude and knowledge that people have about health and health services that might influence their perception of need and use of the health services [25].

Study in Zambia showed that overall, sex and age were significantly associated with health facility utilization; among urban residents, females were more likely to utilize health facilities than males [26]. Males were found to utilize the government health services 0.23 times likely than females while married respondents were 8.1 times more likely to visit the health facilities as compared to unmarried ones [23].

Enabling factors: Enabling factors include depth and breadth of health insurance coverage, whether one can afford copayments or deductibles, whether services are located so that they can be conveniently reached or the availability of suitable care within a reasonable distance i.e., geographic barriers, and other factors that allow one to receive care [24].

Study in Peru shows that the poorest households consulted health professionals for their sick children less frequently and were provided with fewer medication for illnesses where the IMCI algorithm recommended antibiotic use. Inequity in access to health services, here measured as consultations with different health professionals, more in an urban setting despite of high geographical access to health facilities and the Seguro Integral de Salud health insurance providing free health care to children [27].

Study results in Uganda show that in addition to individual material resources and the availability of free public health services are perceived as important in overcoming utilization barriers. [28]. Study done in Mexico indicated increasing levels of education increases the probability of using formal healthcare services in both 2000 and 2006. Significant gaps persist, with members of the worst-off populations still less likely to utilize formal health services. Mexican government's efforts have contributed in overcoming disparities in health services utilization by income groups [29].

The Wealthier population group has a higher probability of obtaining health care when they need it. [21, 30]. The present study in Tanzania shows that, most people in rural areas and urban slums have limited access to modern health care. This is compounded by poor transport system to health facilities and outreach services. It is generally assumed that Traditional medicine is more accessible and available in most areas [31].A study in Vietnam and China found that low income group benefited more from health insurance in terms of using inpatient

services than the high income group in Vietnam, but relatively less in China. The likely explanations for less utilization in China can be high co-insurance payments and the consequent financial burden will make a greater contribution towards decision not to use services for the poor, even small payments for health care can have catastrophic consequences [32].

A study in China found that the poor still do not participate in the CBI, despite very low premiums. Lower income farmers use health care services less than higher income farmers, even after they have enrolled in the programme .Not only does this mean that poor farmers do not enjoy any benefits of the CBI, but they are also still subject to major financial risk when they fall ill [33].
A study in China and Vietnam showed, in the low income group, health insurance members used more outpatient services (17.3%) than non-members (13.8%), while in the middle and high income groups; there were no significant differences in outpatient service utilization between members and non-members of the insurance [32]. In Godular, India that the insured, especially children, are able to access hospital services to a larger extent in comparison with the uninsured [34]. Still, other schemes in countries such as Rwanda and Uganda showed weak financial sustainability because of low renewal rates, high claims-to-revenue ratios and high operational costs. There was weak evidence that suggests both SHI and CBHI have a positive impact on the quality of care and on social inclusion as indicated by enrolment and utilization patterns among vulnerable groups [35].

There is strong evidence in different countries that CBHI improves resource mobilization for health and that both CBHI and SHI improve health service utilization and provide financial risk protection for members in terms of reducing their out-of-pocket expenditure [33, 34, 36].

In rural tropical Ecuador low utilization of health care could be an obstacle to a CHI scheme that is closely linked to the local health service. Almost 40% of interviewees reported that they abstained from seeking care at the local health facility because of barriers to accessing the local PHC center are not only monetary but also cultural and social [37].

Evidences indicate that CBHI schemes in Jamii Bora Health Insurance of Kenya can effectively reach marginalized populations [38]. The evidence from Rwanda suggests that at the individual level, a form of CBHI called Mutuelle improved medical care utilization of the general population. At the household level, Mutuelles protected households from catastrophic health spending. At the provincial level, we found a positive effect of Mutuelles coverage on child and maternal care coverage [39]**.** Even though study done in Burkinafaso could not find an association between deliveries within an institution, antenatal care and membership of the CBHI, regarding mortality, even without actually being part of the CBHI in Burkinafaso called Nouna CBHI scheme. Households that could have been members (being located in areas covered by the scheme) experienced a lower mortality rate compared to households not members because their areas were yet to be covered by the scheme, which point to a selection bias [40].

Need factors. Need for care also affects utilization, but need is not always easily determined without expert input. At the individual level, Andersen and Davidson indicated perceived need for health services (i.e., how people view and experience their own general health, functional state and illness symptoms) [23]. The most immediate cause of health service use, from functional and health problems that generate the need for health care services. Perceived: "How people view their own general health and functional state, as well as how they experience symptoms of illness, pain, and worries about their health and whether or not they judge their problems to be of sufficient importance and magnitude to seek professional help" [24].

In Zambia study showed that respondents who rated their health status as very poor/ poor/fair were twice more likely to utilize heath facilities [41]. Study in Jimma, Ethiopia also shows Presence of a disabling health problem increased the likelihood of utilization of health services 3.3 times more. Similarly, respondents who had an illness episode were 28 times more likely to utilize the services [23].

In general health service utilization in several countries in developing countries especially Ethiopia is influenced by different factors like predisposing, enabling and need factors.

2.2 Conceptual Frame work

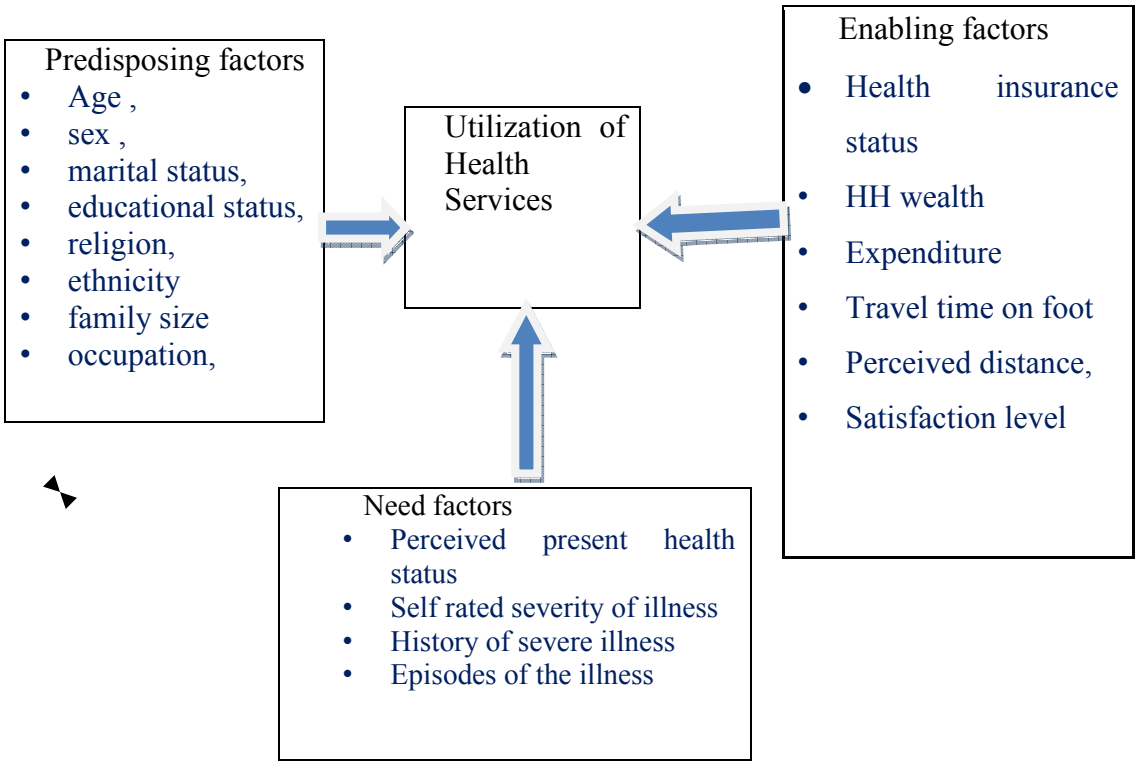

Fig.1 Conceptual Framework on Utilization of health services and associated factors adapted from Andorson, (1995) [25] in Gimbichu district, Central Ethiopia, 2013.

Chapter 3: Significance of the Study

Health services utilization remains very low throughout the country despite there is boosting health institution coverage. The Ethiopian government has initiated community based health insurance (CBHI) for citizens in the informal and agriculture sectors which is estimated to cover 83.6% of the population. The CBHI is expected to improve utilization of health services by reducing out of pocket spending that removes and/or reduces substantial burdens on households during illness/ injury and improve quality of care by increasing resource for health institutions through the contribution of premiums. Community based health insurance is on piloting for almost three years in 13 districts in four regions in Ethiopia which will be scaled up throughout the country.

Health insurance eliminates many but not all barriers of utilization of health services, and CBHI effectiveness is assessed through determining the utilization level of the health services in the community.Gimbichu is one of the CBHI piloting districts.

Therefore the finding of this study would indicate the level of utilization of health services in the district and might be used as baseline data. And would predict the areas that need intervention to attain the set objective of health services delivery and CBHI piloting. It would also give information for relevant bodies to take measures towards the full implementation of CBHI in the district and its scaling up or for policy consumption.

Chapter 4: Objectives

4.1 General Objective

- To assess the level of utilization of health services and associated factors among beneficiaries and non-beneficiaries of community based health insurance in Gimbichu district, East Shoa, Central Ethiopia.

4.2 Specific objectives

1. To determine the level of health service utilization in beneficiaries and non-beneficiaries of community based health insurance in Gimbichu District
2. To compare the level of utilization of health services utilization between beneficiaries and non-beneficiaries of community based health insurance in Gimbichu District.
3. To identify factors associated with health services utilization in beneficiaries and non-beneficiaries of community based health insurance in Gimbichu District.

Chapter 5: Methods and Materials

5.1 Study area and period

This study was conducted in Gimbichu woreda, East Shoa zone, and Oromia regional state, central Ethiopia from Sep-October 2013.Gimbichu is located 84km away from Addis Ababa in the north - eastern direction to Adama and has a total population of about 102,000. The altitude of the woreda comprises 32% high land, 54% medium and 14 % low land. The socioeconomic background of the community is farming. The woreda has four health centers, 33 health posts, 7 private clinics and 1 pharmacy. According to the wereda's annual health report upper respiratory infection, diarrhea, pneumonia, helminthiasis and acute febrile illness were respectively the five top diseases in the woreda as reported in 2013 .The woreda has 35 kebeles and the CBHI is on piloting in all the kebeles .The total household number is about 15,550. According to the report from the woreda in July 2013 total beneficiaries of CBHI households are estimated to be 11,070 and non beneficiaries of CBHI are 4,480 and the ratio of beneficiaries to non beneficiaries' was1.52:1 [14].

5.2 Study Design

Community based comparative cross sectional study design including both quantitative and qualitative methods was employed on households of beneficiaries and non beneficiaries of the community based health insurance in Gimbichu district.

5.3 Population

5.3.1 Source population

The source population of this study was all beneficiaries and non beneficiaries of the community based health insurance having a history of illness or injury in the last one year prior to the study period in Ginbichu district.

5.3.2 Study population

For quantitative:-The study population was a sample of households from the source population.

For qualitative:- All selected heads of health centers, insurance management team leaders in the woreda coordinating office and each five kebele, health extension workers and leaders of health development armies of the community were the study population.

5.3.3 Inclusion Criteria

All selected household head or spouse of both beneficiary and non beneficiary households of CBHI in which at least a person from the household had a history of illness or injury with in the previous one year prior to the survey were included.

5.3.4 Exclusion Criteria

All head of households who were less than 18 years were excluded from the study.

5.4 Sample size and sampling procedure

5.4.1 Sample size determination

To determine the sample size required in detecting levels of utilization among beneficiaries and non beneficiaries of the CBHI scheme in Gimbichu woreda, two population proportion formula was used. There was a 14 percentage point difference (85.4 - 71.4) in the utilization of health services between members and non-members as a study done in rural Burkina Faso and stated as weakness that the sample size was small [40]. Thus to take the possible maximum sample size, at a significance level of (α=5%), power (β=80%) of the test, estimation to detect 10% difference in proportion of the level of health service utilization (variable of interest) among beneficiaries and non beneficiaries of CBHI in Ginbichu (Δ=10%) was used. The average national and Oromia Regional state level of utilization of health services as HSDP IV annual performance report EFY 2003 (2010/11) was 30 % which was used as a baseline estimated proportion of utilization of health care services for both beneficiaries of CBHI and non beneficiaries of CBHI in the district ($P_1 = P_2 = 30\%$) [43].

$$n_1 = \frac{\left[Z_{\frac{\alpha}{2}} \sqrt{\bar{p}\,\bar{\bar{(1-\bar{p})}}} + Z_{\beta} \sqrt{p_1 q_1 + p_2 q_2} \right]^2}{\Delta^2} = \frac{\left[1.96\sqrt{0.3*0.7} + 0.84\sqrt{2(0.3\times 0.7)}\right]^2}{(0.1)^2} \cong 208$$

p_1= Proportion of Utilization of health services among BCBHI, q_1= 100-p_1

p_2= Proportion of Utilization of health services among NBCBHI,q_2=100-p_2

$\bar{P}=p_{1+}p_2/2$

n_1=with 10% non-response rate it will become 229.

where , n_1=number of beneficiaries of CBHI, n_2= number of non beneficiaries of CBHI

n_2= n_1, n_2=229, n_{1+} n_2=458

The final sample size required for the study after considering the design effect (458*2) was 916.

For qualitative study purposefully 18 in-depth interviews, with four health professionals (a head of each four health centers), six insurance management team leaders (a leader in the woreda coordinating office and each five kebele CBHI management team leaders), four health extension workers and four leaders of health development armies of the community (in which two of them were religious leaders) were conducted in the selected kebeles.

5.4.2 Sampling techniques

Stratified proportional sampling procedure of beneficiaries and non beneficiaries in kebeles was used and the study participants (household heads) were selected from randomly selected five kebeles. Sampling frame of households having a history of illness or injury in the previous one year (12 months) of both beneficiary and non beneficiary of CBHI households was established by conducting a census from each randomly selected five kebeles. Households were randomly selected by proportionally allocating the number of beneficiary and non beneficiary households from each selected kebele through computer random number method using spss version 20.The head of HH or in the absence of the head the spouse was the study participant.

For the qualitative study, interview participants those who were knowledgeable to give information about the utilization of health services and the implementation of CBHI in the community were selected using purposive sampling technique. The selected participants were health professionals (heads of the four health centers) , insurance management team leaders (a leader in the woreda coordinating office and each five kebele CBHI management team leaders) and four health extension workers and four leaders the community involved in health development armies were participants of the in-depth interview in selected kebeles.

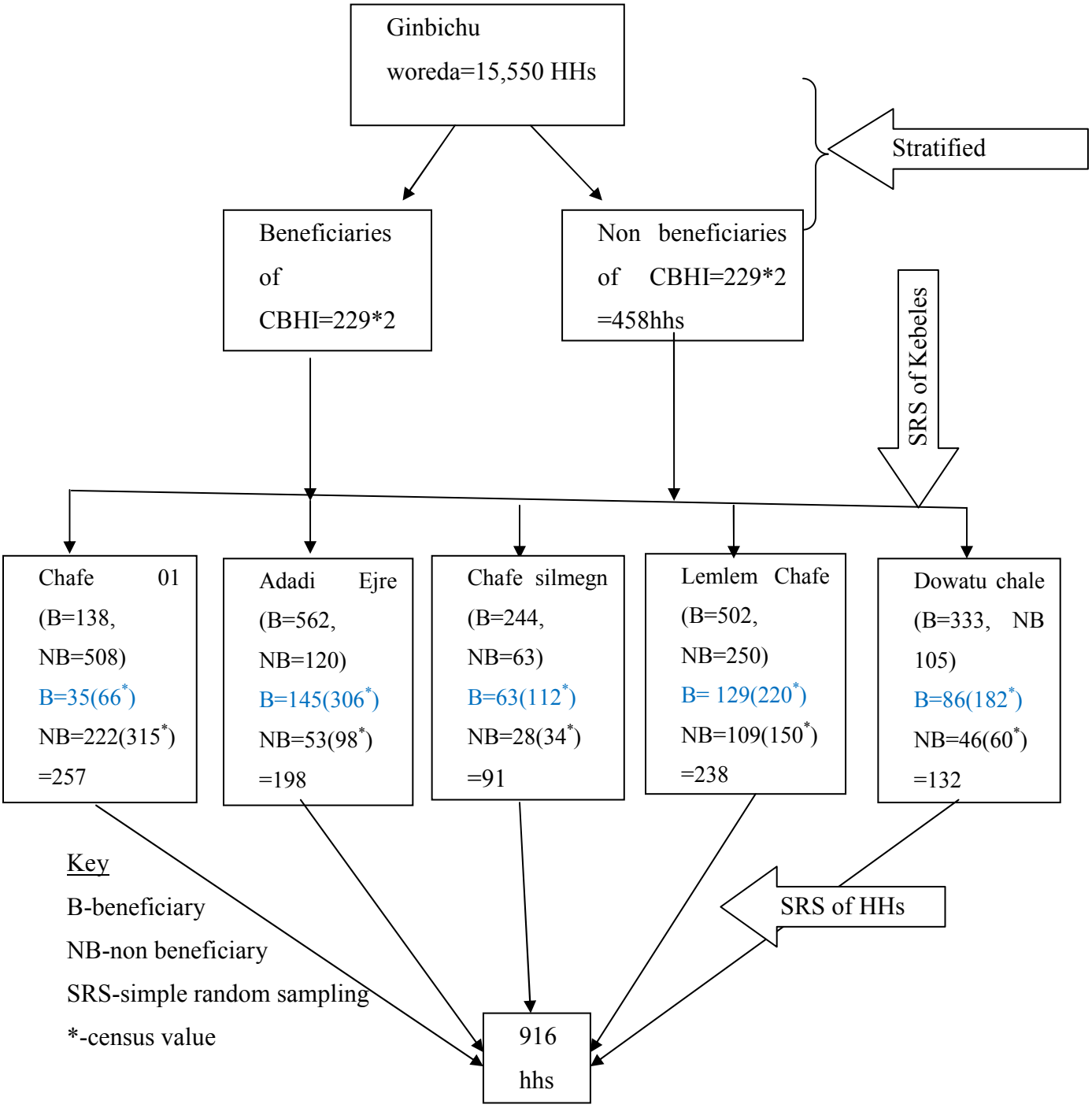

Fig.2 Schematic presentation of sampling procedure in Ginbichu District, Eastern Shoa, Ethiopia, 2013

5.5 Study variables

5.5.1. Dependent variable

- Utilization of health services.

5.5.2. Independent variables

- Age, sex, marital status, educational status, religion, ethnicity, family size, number of children.
- Perceived present health status, perceived history of self rated severity of illness, history of severe illness, episodes of the illness
- Distance from health institution, perceived distance, occupation, household wealth, expenditure
- CBHI membership status

5.6 Data collection tools and process

5.6.1 Data collection tools

A pre-tested structured interviewer administered questionnaires adapted from various health service utilization and community based health insurance studies [17, 22, 40, 43, 44] were used to collect the quantitative data from households. In-depth interview guide was used to collect the qualitative data. The questionnaire primary prepared in English was translated into the local language (Afan Oromo) by experts. This makes the questionnaire simple to understand for data collectors and respondents. To maintain its consistency the questionnaire was translated back to English by another expert.

5.6.2 Data measurements

5.6.2.1 Socio-demographic (predisposing) characteristics: The instrument contains socio-demographic characteristics (age, sex, religion, number of house hold member, number of children and level education of respondents) which were assessed with a mix of various formats like nominal and ordinal measurements.

5.6.2.2 Need factors: Previous history of health status factors and episodes of illness were measured using different items adopted from previous study [23].

Information was collected on perceived current health status, episodes of illness, and perceived severity of illness/injury in the previous 12 months using response option of ordinal, nominal and 'yes or no' measurements.

5.6.2.3 Enabling factors: Distance from health institutions, perceived distance, occupation, household asset, expenditure, CBHI membership status, Information was collected using 'yes or no', nominal, ordinal and five point likert scale measurements.

The wealth index was constructed using household asset data composed of different indicators common to households through a principal components analysis (PCA) using SPSS.

The subsets of indicators used to create a household wealth index were information collected on the households' ownership of radio, phone, bicycle and animal driven cart; amount of grain (wheat, teff, bean, miser ,onion, tomato, potato) counted each in quintal and collected in the last one production year, number of household's live stocks (sheep, goat, donkey, cows, chicken) and ownership of farm land in hectare; and categorical variable; type of housing (type of roof, floor ,wall, number of rooms), cooking fuel type, source of water supply and toilet facility were transformed into a dichotomous character (0,1) [42]. These dichotomous indicators and those that are continuous are after checking their reliability having standardized cronbach alpha (0.807) for non beneficiaries and (0.772) for beneficiary groups of CBHI were examined using a principal components analysis to produce a common factor score for each household respectively. The resulting combined wealth index has a mean of zero and a standard deviation of one. Once the index is computed, wealth quintiles (from lowest to highest) are obtained by ranking household score. The quintiles were households wealth status of Q1 (poorest/lower), Q2 (very poor/low), Q3 (poor/medium), Q4 (less poor/high), and Q5 (richest/higher).

5.6.3 Personnel and training

Ten data collectors who completed grade 12 were recruited and trained by the principal investigator for two days.

Two BSc nurses were recruited as supervisors to monitor the progress of data collection. A BSc holder health education professional and one BSc holder public health nurse were recruited and trained to conduct the in-depth interview.

5.6.4 Data collection method

In this study both qualitative and quantitative data collection methods were employed. For the qualitative part of the study in-depth interview was conducted by the two interviewers independently took detailed field notes on respondents' answers recorded by hand and captured the interview using audiotape as the in-depth interview guide in the selected kebeles of the Ginbichu district. For the quantitative part of the study house to house survey of randomly selected households was carried out by ten trained data collectors in these selected kebeles.

5.7 Data processing and analysis

After the completion of field survey, data was checked, edited, coded and entered, categorized and prepared for analysis before entry into the computer then it was cleaned and predictor variables at significance of $p <= 0.25$ has been identified in univariate analysis and employed for binary logestic regression at significance of $p < 0.05$ in multivariate analysis . Statistical packages Epi data version 3.1 for data entry and spss version 20 for analysis were used. For the quantitative data percentages, frequencies, cross tabulations were calculated. Logistic regressions of univariates and multivariate were done to measure the associations between dependent and independent variables. The qualitative data was analyzed thematically and triangulated.

5.8 Data quality

The questionnaire was pretested, so that the data collecting instruments were tested and based on the finding appropriate correction has been taken (including estimation of the time needed for data collection, respondents' ability to understand and to check for glitches in wording the questions). The supervisors were oriented on how to solve problems and ambiguities on the questions. After recruiting competent data collectors, appropriate training was given and close supervision has been taken daily. The collected data was cross checked and communicated with data collectors for its completeness. The principal investigator communicated with supervisors daily and has followed the data collection closely.

5.9 Operational definitions

Utilization of Health services: If a person being sick or injured visited a health institution or used any modern health care services already available in the community in the previous 12 months.

Illnesses:- Diseased or sickness or bad health state reported with at least one of the following conditions: having stayed in bed; having been restricted from normal activities (e.g. work, school); having been able to do normal activities but with reduced capacity.

Perceived Severity of illness: Individual's self opinion that a disease condition or bad health state and its consequences are serious.

Beneficiaries of CBHI: Member of community based health insurance that had paid the premium of 180 birr (≈US$9.80) for the period from July 2012 to June 2013.

Non-beneficiaries of CBHI: Member of population who had not paid the premium of 180 birr (≈US$9.80) for the period from July 2012 to June 2013.

Perception of own(self) health :Was interrogated by asking the respondents to grade their own health in general as being very good, good, fair, bad or very bad , or had illness or not.

Household Wealth status index -Households living status categorize to poor or rich were measured by using their information of the ownership on the housing condition like type of floor, type of roof, type of wall, water source, type of latrine , using ownership of radio, bicycle, motorcycle, car, refrigerator, amount of grain(collected in the last one production year, number of household's live stocks and ownership of farm land , and after calculating using PCA the households wealth were grouped in quintiles. The quintiles were Q1 (poorest/lower), Q2 (very poor/low), Q3 (poor/medium), Q4 (less poor/high), and Q5 (richest/higher)

5.10 Ethical consideration

Ethical clearance was obtained from Jimma University College of Public health and Medical Sciences ethical committee, then by explaining objectives of the study and its significance, relevant permission was obtained from the responsible bodies of the health office and administrations of regional, woreda and kebele level. At individual level after explaining the purpose of the study verbal informed consent was obtained from all participants prior to their participation in the study. Furthermore, respondents were informed that their participation in

the study was voluntary and that they were not obliged to answer to any questions with which they feel discomfort. They were also free to withdraw their participation at any time they want. Participants were assured that confidentiality would be maintained and the respondent's name or identifier was not included in the questionnaire.

5. 11. Dissemination and utilization of results

The findings will be presented for mock and final defense in the Jimma University College of Public Health and Medical Sciences. Recommendations based on findings will be forwarded to the Ginbichu district health and administrative offices, Oromia regional health office and the Ethiopian national health insurance as well as feedback will be given to the community. The finding can be presented on meeting/conferences or attempts will be taken for publication on peer journals.

Chapter 6: Result

6.1. Characteristics of the respondents

The respondents of the study were 900 heads of households (448 beneficiaries of CBHI and 452 non beneficiaries of CBHI of the district) out of 916 sampled households with a response rate of 98.25 % (97.82% of beneficiaries and 98.69% of non beneficiaries). Among the beneficiaries of CBHI the median age of the respondents was 45 years with a range of 19–91, whilst it was 42 years with a range of 19–89 for non beneficiary. In both categories of beneficiaries and non beneficiaries of CBHI, most of the respondents were males (337(75.2%) among beneficiaries and 339(75%) from non beneficiaries). With regard to their religion, 378(84.4 %) and 314(69 %) of the respondents were Orthodox Christians from beneficiaries and non beneficiaries of CBHI, respectively. Most of the respondents in both groups were Oromo in their ethnicity (386(86.2%) from beneficiaries and 400(88.5%) from non beneficiaries of CBHI) respectively (table 1).

Table 1: Socio-demographic characteristics of respondents of beneficiaries and non beneficiaries of CBHI in Ginbichu district, Central Ethiopia, October, 2013

Socio-demographic	Beneficiaries of CBHI		Non Beneficiaries of CBHI	
	Frequency	%	frequency	%
Sex				
Male	337	75.2	339	75
Female	111	24.8	113	25
Age				
<45	204	45.5	275	60.8
>=45	244	54.5	177	39.2
Ethnicity				
Oromo	386	86.2	400	88.5
Amhara	59	13.2	36	8.0
Tigre	3	0.7	12	2.7
Other	-	-	4	0.9
Educational status				
No Education	213	47.5	158	35.0
Only Read & Write	116	25.9	135	29.9
1-8	92	20.5	105	23.2
9-12	19	4.2	37	8.2
Certificate and above	8	1.8	17	3.8
Religion				
Orthodox	378	84.4	312	69.0
Protestant	38	8.5	112	24.8
Muslim	26	5.8	24	5.3
Catholic	1	0.2	2	0.4
Other	5	1.1	2	.4
Marital status				
Never married	40	8.9	23	5.1
Currently married	368	82.1	371	82.1
Divorced	33	7.4	30	6.6
Widowed	7	1.6	28	6.2

6.2. Comparison of health service utilization and health problems/conditions.

Three hundred sixty three (81%) of the respondents of beneficiaries of CBHI visited the health institutions for their previous illness history in the last 12 months, whereas only 285(63.1%) from non beneficiaries of CBHI visited the health institutions in the history of illness (Fig.3). This result is supplemented by the qualitative study result of in-depth interview, almost all of the informants suggested that recently after the initiation of CBHI, the community is aware of the benefit of the insurance on health care services and the utilization of health services increased. From the leaders of health centers in the district, a 30 years old male health professional explained that *"Before the implementation of this CBHI few patients come to our health center after being severely sick, but now the flow of patient is over each day, even they come for their simple pain. For example he added, those patients who are rich in the community after being seen in the private clinic comes to this government health center to take medications ordered in the private clinic showing their card".*

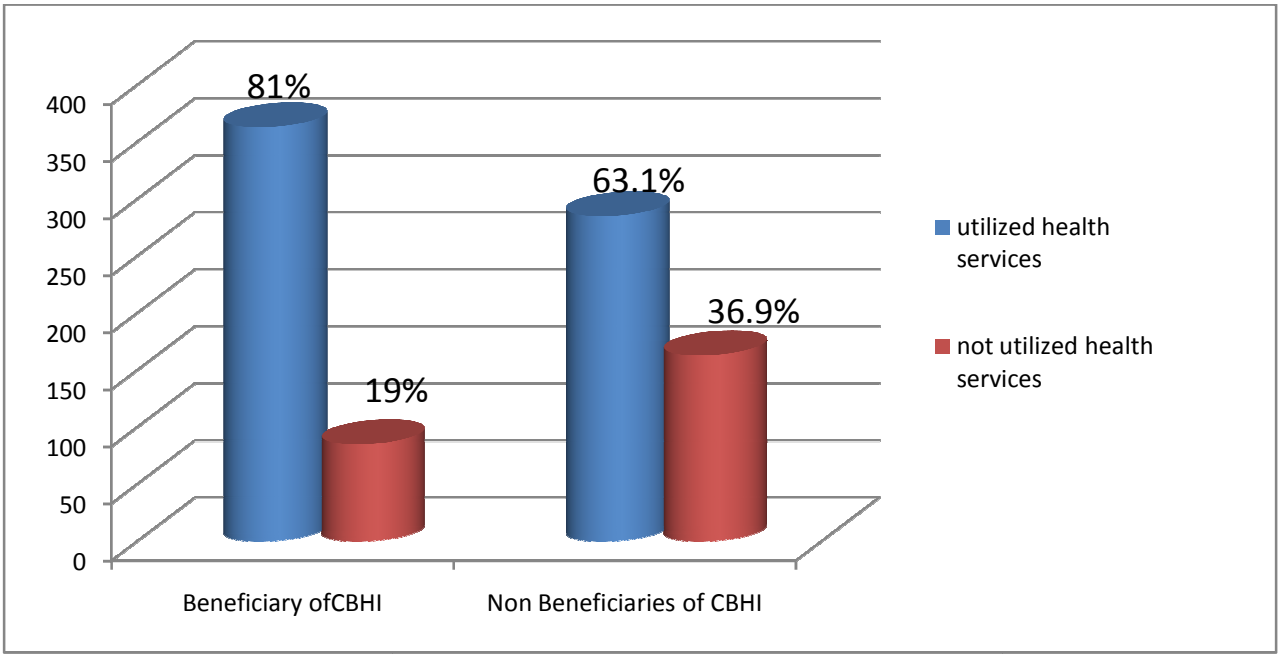

Fig .3 Utilization level of health services among beneficiaries and non beneficiaries of CBHI in Ginbichu District, Eastern Shoa, Ethiopia,October,2013.

The first visit of health institution was relatively higher among beneficiaries (199(52.4%)) than non beneficiaries (79 (28.9%)) and a repeated visit of four times or more was higher among beneficiaries than non beneficiaries. History of admission was relatively higher amongst non beneficiaries of CBHI (109 (24.4%)) than beneficiaries of CBHI (97(21.7%)). Similarly, hospital and private health institution health service users were relatively higher amongst non beneficiaries of CBHI than beneficiaries of CBHI. On the other hand, health service users from health center were higher amongst beneficiaries of CBHI as compared to non beneficiaries of CBHI (table 2).

Table 2: Comparison of self reported utilization of health services for the history of illness in the last 12 months by respondents of beneficiaries and non beneficiaries of CBHI in Ginbichu district, Central Ethiopia, October, 2013

Variables	**Beneficiaries of CBHI**		**Non Beneficiaries of CBHI**	
	frequency	**%**	**frequency**	**%**
Visited HI in 12 months				
No	85	19.0	167	36.9
Yes	363	81.0	285	63.1
Admitted in 12 months				
No	351	78.3	334	75.4
Yes	97	21.7	109	24.6
Number of Visit in12moths				
1	199	52.4	79	28.9
2	46	12.1	51	18.7
3	69	18.2	28	10.3
>=4	66	17.4	115	42.1
Type of HI visited				
Hospital	60	16.8	98	34.6
Health centre	303	84.6	176	61.5
Health post/clinic	8	2.2	34	11.9
Private health facility	25	7.0	52	18.2
Drug vendor	3	0.8	29	10.1
Traditional healer	5	1.4	14	4.9

HI-health institution

One hundred seventy (43.1%) of beneficiaries and 152(33.6%) of non beneficiaries of CBHI had chosen to visit the type of the health institution because they reported that they received the treatment with courtesy and respect (fig.4).

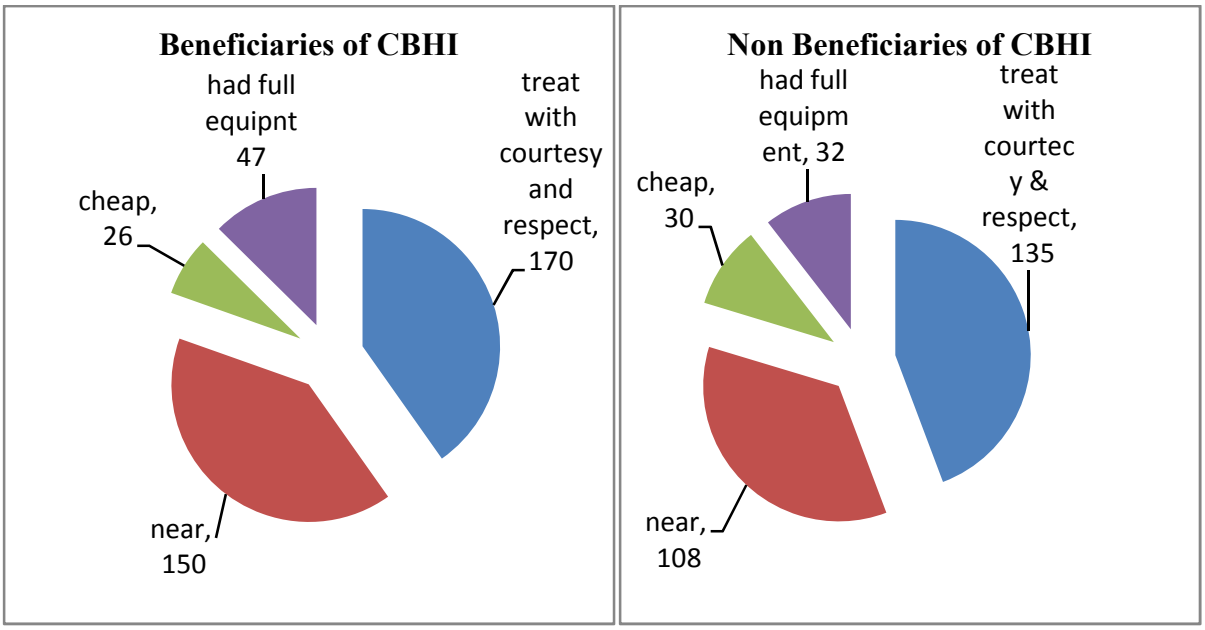

Fig.4 Reason of choosing to use health services among health institutions in Ginbichu District, Eastern Shoa, Ethiopia, October, 2013

Diarrhea (140/31.3%) and respiratory (85/18.8%) diseases were major health problems similarly among both beneficiaries and non beneficiaries of CBHI respectively. In contrary there was relative difference in fighting injuries which was slightly higher among non beneficiaries (85/18.8%) than beneficiaries (25/5.6%) in the district (table 3).

Table 3. Occurrence of different diseases and health conditions in households that required utilization of health services among both beneficiaries and non beneficiaries of CBHI in Ginbichu district, Central Ethiopia, October, 2013

Diseases/health conditions	Beneficiaries of CBHI		Non Beneficiaries of CBHI	
	frequency	%	frequency	%
Malaria	69	15.4	16	3.5
Diarrhea	140	31.3	85	18.8
Fighting injury	25	5.6	85	18.8
Accident not fighting	5	1.1	6	1.3
Respiratory diseases	98	21.9	92	20.4
ANC for illness	15	3.3	9	2.0
Delivery services	19	4.2	25	5.5
Hypertension	31	6.9	53	11.7
Diabetic	12	2.7	37	8.2
Others*	20	7.6	40	9.8

* Others-HIV/AIDs, typhoid, rheumatoid, etc.

6.3. Factors Affecting Health Service Utilization

6.3.1. Socio-demographic predictors of health service utilization

Among non beneficiaries of CBHI, out of all socio-demographic factors sex, age, marital status, family size, number of children and occupation of respondents were found to have statistically significant association in binary logestic analysis with utilization of health services. However, among beneficiaries of CBHI none of the socio-demographic variables showed association with utilization of health services except family size (table 4).

Table 4. Socio-demographic predictors of health service utilization among non beneficiaries and beneficiaries of CBHI, Ginbichu district, Central Ethiopia, October, 2013.

Variables	Non Beneficiaries of CBHI			Beneficiaries of CBHI		
	Utilized health services		COR(95%CI)	Utilized health services		COR(95%CI)
	Yes -f (%)	No -f (%)		Yes -f (%)	No -f (%)	
Sex						
Male¥	233(68.7)	106(31.3)	1	201(80.4)	49(19.6)	1
Female	52(46.0)	61(54.0)	.388(.251,.599)*	162(81.8)	36(18.2)	1.097(.681,1.768)
Age						
<=44¥	164(59.6)	111(40.4)	1	168(82.4)	36(17.6)	1
>=45	121(68.4)	56(31.6)	1.462(.982,2.177)*	195(79.9)	49(20.1)	.853(.529,1.374)
Marital status						
Never married	11(47.8)	12(52.2)	1.417(.464,4.323)	33(82.5)	7(17.5)	1.886(.302, 1.772)
Currently married	238(64.2)	133(35.8)	2.766(1.258,6.079)*	301(81.8)	67(18.2)	1.797(.341, 9.461)
Divorced	25(83.3)	5(16.7)	7.727(2.273,26.268)*	24(72.7)	9(27.3)	1.067 (.175,6.517)
Widowed¥	11(39.3)	17(60.7)	1	5(71.4)	2(28.6)	1
Family size						
<=5¥	124(54.1)	105(45.9)	1	146(81.1)	34(18.9)	1.009(.623,1.634)
>5	161(72.2)	62(27.8)	2.199(1.486, 3.253)*	217(81.0)	51(19.0)*	1
Education						
No Education¥	95(60.1)	63(39.9)	1	165(77.5)	48(22.5)	1
Read & Write	96(71.1)	39(28.9)	1.632(1.000,2.664)	96(82.8)	20(17.2)	1.396(.782,2.492)
1-8	70(66.7)	35(33.3)	1.326(.792,2.222)	78(84.8)	14(15.2)	1.621(.843,3.115)
9-12	15(40.5)	22(59.5)	.452 (.218,1.938)	17(89.5)	2(10.5)	2.473(.552,11.082)
Certfcate & above	9(52.9)	8(47.1)	.746 (.273,2.037)	7(87.5)	1(12.5)	2.036(.244,16.962)
Occupation						
Farmer ¥	208(71.7)	82(28.3)	1	348(81.7)	78(18.3)	1
Merchant	65(52.0)	60 (48.0)	1.381(.143, 3.552.)	12(66.7)	6(33.3)	1.617(.042, 12.150)
Housewife	7(50)	7(50)	.809(.412,1.589)	-	-	-
Student	6(54.5)	5(45.5)	.555(.209, 1.476)	1(50)	1(50)	.712(.037, 13.787)
Daily laborer	10(55.6)	8(44.4)	.592(.152, 2.305)	5(83.3)	1(16.7)	1.634(.092, 8.972)

*: p.value <0.25, ¥: reference category, f: frequency, CI: confidence interval

6.3.2. Socioeconomic and CBHI status predictors of health service utilization

There is highly significant association of CBHI status with utilization of health services among total population of both groups of beneficiaries and non beneficiaries of CBHI (p.value<0.0001). This is also similar to qualitative finding that most participants explained on the advantage of being member of CBHI that every member easily visits health institutions for the health problems their household members' faces using CBHI membership card.

One informant; a 40 year male interviwee, from health development armies happily said that *"Now our community is taking free treatment throughout the year by participating in single payment of 180 (~$9.8), surprisingly we need such mechanism for the treatment of our live stocks"*.

Quintiles of house hold wealth index and monthly expense category were found to be significantly associated with utilization of health services in both beneficiaries and non beneficiaries of CBHI (table 5).

6.3.3. Health status and health service access predictors of health service utilization

Amongst non beneficiaries of CBHI; self rated present health status, self rated severity of illness, illness episodes and having history of perceived severe illness in previous last 12 months, travel time on foot to nearest health institution and perceived distance from nearest health institution were found to have significant association with utilization of health services. But only self rated present health status, self rated severity of illness in previous 12 months and travel time on foot to nearest health institution showed association with health service utilization among beneficiaries of CBHI (table 6).

Table 5. Socioeconomic and CBHI status predictors on health service utilization among beneficiaries and non beneficiaries of CBHI, Ginbichu district, Central Ethiopia, October, 2013.

Variables	Beneficiaries CBHI			Non beneficiaries CBHI		
	Utilized health services		COR(95%CI)	Utilized health services		COR(95%CI)
	Yes-f (%)	No-f (%)		Yes-f (%)	No-f (%)	
CBHI status						
Beneficiary	365(81.1)	85(18.9)	2.534(1.870,3.434)**	-	-	-
Non beneficiary¥	-	-	1	283(62.9)	167(37.1	
Quintiles of hh wealth						
1-lower ¥	66(68.0)	31(32.0)	1	31(37.3)	52(62.7)	1
2-low	65(77.4)	19(22.6)	1.607(.826,3.127)	46(56.8)	35(43.2)	2.205(1.180,4.120)*
3-medium	69(87.3)	10(12.7)	3.241(1.473,7.131)*	65(79.3)	17(20.7)	6.414(3.201,12.850)**
4-high	77(87.5)	11(12.5)	3.288(1.534,7.047)*	86(76.1)	27(23.9)	5.343(2.873,9.935)**
5-higher	86(86.0)	14(14.0)	2.885(1.421,5.857)*	57(61.3)	36(38.7)	2.656(1.443,4.887)**
Monthly expense						
<=500¥	75(73.5)	27(26.5)	1	146(61.3)	92(38.7)	1
501-1500	150(83.3)	30(16.7)	1.800(.999, 3.245)*	86(69.4)	38(30.6)	1.708(1.103,2.644)*
>1500	97(94.2)	6(5.8)	5.820(2.286,14.818)**	52(58.4)	37(41.6)	2.096(1.253,3.505)*

*: P.value <=0.05, **:p.value<.001 reference category, f: frequency, CI: confidence interval; HI: health institution

Table 6. Health status and health service access predictors of health service utilization among non beneficiaries and beneficiaries of CBHI, Ginbichu district, Central Ethiopia, October, 2013.

Variables	Non Beneficiaries of CBHI			Beneficiaries of CBHI		
	Utilized health services		COR(95%CI)	Utilized health services		COR(95%CI)
	Yes-f(%)	No-f(%)		Yes-f(%)	No-f(%)	
Rated present health						
Excellent/v.good/good¥	176(54.7)	146(45.3)	1	271(77.7)	78(22.3)	1
Fair/poor	109(83.8)	21(16.2)	4.306(2.570, 7.214)***	92(92.9)	7(7.1)	3.783(1.685,8.492)**
Rated illness in 12mnth						
Mild(Slight¥)	39(41.9)	54(58.1)	.160 (.089,.290)***	79(72.5)	30(27.5)	.482(.269,.863)*
Medium	129(59.7)	87(40.3)	.330(.199,.546)***	131(82.9)	27(17.1)	.888(.498,1.582)
Severe	117(81.8)	26(18.2)	1	153(84.5)	28(15.5)	1
Severe illness in 12nths						
Yes	232(77.6)	67(22.4)	1	288(93.8)	19(6.2)	1
No¥	53(34.6)	100(65.4)	.153(.100,.235)***	75(53.2)	66(46.8)	.075(.042,.133)***
Illness episodes						
Acute (<= two weeks)¥	104(55.0)	85(45.0)	1.0	189(95.0)	10(5.0)	1.0
Chronic (>=two weeks)	68(59.1)	47(40.9)	1.182(.739, 1.891)	41(89.1)	5(10.9)	.434(.141,1.337)
Minor ailment	76(80.9)	18(19.1)	3.451(1.916, 6.215)**	68(98.6)	1(1.4)	3.598(.452,28.633)
Major ailment	37(68.5)	17(31.5)	1.779(.936,3.380)*	65(98.5)	1(1.5)	3.439(.432,27.387)
Travel time						
<=2hr	270(64.4)	149(35.6)	1	335(82.9)	69(17.1)	1
>2hr¥	15(45.5)	18(54.5)	.460(.225,.939)*	28(63.6)	16(36.4)	.360(.185,.702)**
Perceived distance						
Near	132(61.7)	82(38.3)	1	119(79.3)	31(20.7)	1
Medium	111(73.5)	40(26.5)	1.724(1.094,2.716)*	151(83.9)	29(16.1)	1.356(.774, 2.376)
Far ¥	42(48.3)	45(51.7)	.580(.351,.959)*	93(78.8)	25(21.2)	.969(.536, 1.753)

*: P.value <.25,**:p.value<.05,***p.value<0.001,¥: reference category, f:frequency, CI: confidence interval; HI:health institution

6.3.4. Final predictors of health service utilization among beneficiaries and non beneficiaries of CBHI

All variables found to be associated with utilization of health services in bivariate analysis at ($p<0.25$) were entered in to forward stepwise logistic regression independently for both beneficiaries and non beneficiaries of CBHI groups for multivariate analysis. From total of 12 variables that were entered, six were found to have significantly independent associations with utilization of health services among respondents from non beneficiaries of CBHI (table 7). From total of six variables that were entered, three were found to have significant independent associations with utilization of health services among respondents from beneficiaries of CBHI (table 8).

Depending on the households wealth index developed, the odds of utilizing health services was 3 and 2 times likely higher among higher quintiles of respondents' household wealth (richest) compared to lower quintiles of respondents' household wealth (poorest) from respondents of beneficiaries and non beneficiaries of CBHI {(AOR=3.066 , 95%CI: 1.463, 6.426,) &(AOR=2.276, 95%CI: 1.069, 4.846)} respectively.

Participants from in-depth interview elaborated on the resource use by households to get treatment by comparing before and after the implementation of CBHI like this: CBHI strengthened the culture of supporting each other especially the poor. There is free treatment with cheap payment once every year. Most of them expressed with pleasure that we could easily take our family members like children or mothers to get treatment from either health center or hospital as it was needed. A 45 years old male community leader stated stressfully as "*In the previous years, people around our village when they became sick accidentally especially in the summer season they used borrow money in cash from their neighbor or other persons living in other place by signing transfer of ownership of their oxen, land or other property until they pay it back but now this problem is solved by the insurance".*

From the interview participants concerning the disadvantage of CBHI, few community leaders from the in-depth interview participants mentioned that those households who didn't posses their own farm land and other physical properties were not members of the insurance due to some had difficulty to pay but few of them associated the premium payment with other taxes payed for government at the start of the CBHI implementation eventhough this assumption was changed at the moment.

Respondents having history of illness, self rated severity of illness in previous 12 months were about 2.2 and 3.4 times more likely to use health services compared to respondents having history of mild illnesses from beneficiaries and non beneficiaries of CBHI (AOR =2.177, 95%CI:1.173,4.040 & AOR =3.381, 95%CI : 1.660, 6.887) respectively (table 9). This result is supplemented by qualitative result that some participants stated; the perception of the community on illnesses is not good because they have the inclination of no need to visit health services for illness on time because it was believed as any illness subsidizes by itself after a time. In addition there was problem of infrastructure like road and transport services to get treatment on time.

Even though distance and travel time to nearest HI were not significantly associated to utilization of health services in both groups, perceived distance was significantly associated in non beneficiaries of CBHI in the final model. Particularly respondents having perceived distance as medium from nearest health institutions used the health service 3.4 more likely than those who perceived the distance was far among NBCBHI. (AOR=3.399(95% CI; 1.648, 7.011)).

Table 7. Final predictors of health service utilization among beneficiaries of community based health insurance, Ginbichu district, Central Ethiopia, October. 2013

Variables	Utilized health services		COR(95%CI)	AOR(95%CI)
	Yes-f (%)	**No-f (%)**		
Quintiles of hh wealth				
1-lower ¥	66(68.0)	31(32.0)	1	1
2-low	65(77.4)	19(22.6)	1.607(.826,3.127)	1.757(.879,3.513)
3-medium	69(87.3)	10(12.7)	3.241(1.473,7.131)	2.917(1.300,6.547)*
4-high	77(87.5)	11(12.5)	3.288(1.534,7.047)	2.873(1.307,6.313)*
5-higher	86(86.0)	14(14.0)	2.885(1.421,5.857)	3.066(1.463,6.426)*
Rated present health				
Excellent/v.good/good¥	271(77.7)	78(22.3)	1	1
Fair/poor	92(92.9)	7(7.1)	3.783(1.685,8.492)*	2.818(1.228, .463)*
Rated illness in 12 mths				
Slight¥	79(72.5)	30(27.5)	1	1
Medium	131(82.9)	27(17.1)	1.842(1.021,3.324)	2.006(1.080,3.729)*
Severe	153(84.5)	28(15.5)	2.075(1.159, 3.714)	2.177(1.173,4.040)*

*:p.value<0.05, **: p.value<0.001, ¥: reference category, f: frequency, CI: confidence interval; HI: health institution

Table 8.Final predictors of health service utilization among non beneficiaries of community based health insurance, Ginbichu district, Central Ethiopia, October. 2013.

Variables	Utilized health services		COR(95%CI)	AOR(95%CI)
	Yes-f (%)	No-f (%)		
Sex				
Male¥	233(68.7)	106(31.3)	2.579(1.668,3.985)**	2.697(1.558,4.669)*
Female	52(46.0)	61(54.0)	1	1
Quintiles of hh wealth				
1-lower ¥	31(37.3)	52(62.7)	1	1
2-low	46(56.8)	35(43.2)	2.205(1.180,4.120)	1.972(.945,4.112)
3-medium	65(79.3)	17(20.7)	6.414(3.201,12.850)*	5.921(2.564,13.675)**
4-high	86(76.1)	27(23.9)	5.343(2.873,9.935)*	5.205(2.451,11.054)**
5-higher	57(61.3)	36(38.7)	2.656(1.443,4.887)*	2.652(1.276,5.512)**
Rated present health				
Excelnt/v.good/good¥	176(54.7)	146(45.3)	1	1
Fair/poor	109(83.8)	21(16.2)	3.783(1.685,8.492)*	3.387(1.840,6.234)**
Rated illness in12 mths				
Mild (Slight) ¥	39(41.9)	54(58.1)	1	1
Medium	129(59.7)	87(40.3)	1.842(1.021,3.324)	1.781(.976,3.249)
Severe	117(81.8)	26(18.2)	2.075(1.159, 3.714)*	4.578(2.230,9.397)**
Severe illness in 12 mths				
Yes	232(77.6)	67(22.4)	6.533(4.251, 10.042) **	4.093(2.443,6.859)**
No¥	53(34.6)	100(65.4)	1	1
Perceived distance from HI				
Near ¥	132(61.7)	82(38.3)	1.724(1.094,2.716)*	3.464(1.747,6.872)
Medium	111(73.5)	40(26.5)	.580(.351,.959)*	3.399(1.648,7.011)**
Far	42(48.3)	45(51.7)	1	1
Travel time				
<=2hr	270(64.4)	149(35.6)	2.774(1.424,5.404)*	2.438(.981,6.061)
>2hr¥	15(45.5)	18(54.5)	1	1

*:p.value<0.05, **: p.value<0.001, ¥: reference category, f: frequency, CI: confidence interval; HI: health institution

Chapter 7: Discussion

Health services that are provided in health care institutions need to be utilized by the communities it rendered to deliver. This study tried to assess the level of health services utilization among beneficiaries and non beneficiaries of CBHI, and identified the contribution of socio-demographic, socioeconomic, health status, accessibility of health institutions and community based health insurance status to utilization of health services in the community. But religion, ethnicity and educational status did not show a significant association.

There are limitations in this study, there was no baseline data assessed on the topic in the area. And like other similar studies it might have recalled bias since evaluation of house holds' utilization of health services and associated factors assessment had used retrospectively 12 months recall period. Most of the factors showed significant associations among non beneficiaries of CBHI group eventhough only household wealth index, self rated present health status and self rated illness in the previous 12 months had siginificant associacions. This might suggest that being a member of CBHI purged different perceived barriers to health services utilization of the community.

This study has demonstrated that the proportion of respondents who utilized the health services among both beneficiaries and non beneficiaries was high compared to previous national reports and studies done in the country. Particularly this study showed 363 (81%) from beneficiaries and 285(63.1%) from non beneficiaries of CBHI visited the health institutions in the history of illness in the previous 12 months. This result in both groups is higher than study done in Jimma, Ethiopia which was 398 (48.7%) of the respondents had visited a health care facility for their illness history in the previous 12 months but slightly similar to Singapore [23, 43, 44]. This difference can be explained by the accelerating expansion of health facilities and increased number of trained health personnel in the recent years in the country.

The proportion of utilization of health services was higher among the respondents of beneficiaries of CBHI than non beneficiaries of CBHI having 17.9 percentage point difference. This could be supported by the qualitative finding that almos all participants described that members of the CBHI visits the health services early & easly for their illness by showing their card.

For instance one of the leaders of health centers explained by comparing the situation before and after the implementation the health insurance, the flow of patients increased day to day for simple pain even though few patients used to come to the health center after being severely ill in the previous years. This is similar to studies done in Burkinafaso [40] and Kenya [38] in which proportionally members of CBHI used the health services more than non members of CBHI. But the percentage difference of utilization of health services among members and non members of that of Burkinafaso is 14 percentage point difference (85.4 - 71.4) which was less than this finding. In addition study done on impact health insurance in Africa and Asia support this result by justifying health insurance improves utilization of health services through resource mobilization and financial protection [36]. And Community based health insurance status was found to have a statistical significant association with utilization of health services (p.value <0.001). This is supported by the study done in Burkinefaso which showed that members were 2.23 times more likely to use health services compared to non-members [40].
This may reasonably indicate that being a beneficiary of the CBHI increases the probability of health services utilization. This may be also explained as being a member of CBHI is a motivating factor to visit health institutions during illness and the difference between this study and Bukinafaso may be due to sociocultural or benefit package differences.

Without any doubt those households with high household wealth may use the available health services for their illness. This study result showed that there is a significant association of households' wealth status with health services utilization. Household with higher wealth index and higher expenditure level utilizes the health more likely compared to lower household wealth and lower level of household expenditure keeping other variables constant even though household expenditure level is not included in the final model in both groups of beneficiaries and non beneficiaries of CBHI. Despite the level of household wealth is determinant in both groups of beneficiaries and non beneficiaries CBHI on utilization of health services, the odds of utilizing health services by higher group of household wealth compared to lower household wealth is more in beneficiaries of CBHI. This contradicts with a study done comparing between rural China and Vietnam.

Even though health insurance members were significantly more likely to utilize inpatient services and there is no difference in outpatient care utilization in both groups in both countries, from three income groups in Vietnam, the lowest income group had the highest odds ratio (2.5) than the middle and high income groups (1.6 and 1.4) respectively [32]. But findings from Uganda, Orissa India and Peru supported this finding. In Peru the least poor households consulted nurses and health technicians to a lower extent (1% and 1%, respectively) than the poorest households (12% and 24%, respectively) and qualitative study in Uganda showed that the least poor and middle wealth category found it problematic to access health services when cash or financial resource was unavailable [27,28, 35].

This variation can be due to difference in health service packages covered by the insurance scheme in each country.

This finding showed that poor households utilized the health services less, being insured or not insured. This may have an important implication that, the poor have difficulty in other copayments related to health care even though they are members of CBHI compared to their counterparts and that financial risk was obvious for poor (lowest household wealth status) non beneficiaries CBHI.

Even though the distance and travel time to the nearest health institution were not significantly associated with utilization of health services in both groups, perceived distance was significantly associated in non beneficiaries of CBHI in the final model.

Respondents having perceived distance as a medium from nearest health institutions used the health services more than those who perceived the distance was far among non beneficiaries of CBHI. This finding is similar to study in Jimma, Ethiopia in which who perceived the distance medium, 1.2 times more likely to visit the health institutions as compared to those who perceived it as 'far' [23] and Godular, India [34] and other related studies [41,45,46,47].

This may have an implication of perceived distance is related to topographic situations like road and transport facilities to the nearest health institution are challenging to get treatment.

On factors related to perceived health and illnesses; self rated present health status and self rated perceived severity of illness in the last 12 months showed significant association with the utilization of health services in both groups of beneficiaries and non beneficiaries of CBHI in which more significantly higher among non beneficiaries.

Studies in Zambia (26), Uganda (28) & Mexico (29) showed that those who perceived their present health status as poor and having a history of higher severity of illness use more formal health services than those who perceived a lower severity of illness which resembled this finding. For example in Uganda those who perceived their present health status poor (fair), utilized health services 2 times more likely than those who perceived good (excellent).
This result is consistent specially with study done in Mexico found that those who perceived a higher severity of illness use more formal health services than those who perceived a lower severity of illness.
This may indicate that people utilizes the available health services when they feel the disease or bad health condition is more serious.

Limitations of the study

This study couldn't assess base line data on utilization of health services among beneficiaries and non beneficiaries of CBHI. It didn't assess different factors related to in-patient care. In addition, the questionnaire asks self report of the house hold head on health service utilization and associated factors of one year history which may result in recall bias, the respondents may give over or under expected responses that may result on social desirability bias.

Chapter 8: Conclusion and Recommendation

8.1. Conclusions

This study has shown that utilization level of both beneficiaries and non beneficiaries of CBHI were satisfactory compared to previous national reports and studies even though relatively lower among non beneficiaries of CBHI in the Ginbichu district. Final predictor variables on utilization of health services are:

- *Predisposing factors:* Among predisposing or sociodemographic factors only sex of the respondent is the significant variable in the final multivariate logestic regression in non beneficiaries CBHI group.
- *Enabling factors:* Quintiles of household wealth and insurance status were the only predictor variables for the utilization of health services in both groups of beneficiaries and non beneficiaries of CBHI.
- *Need factors:* Self rated present health status and self rated severity of illness in previous 12 months in both beneficiaries and non beneficiaries of CBHI; and history of perceived severe illness in past 12 months, perceived distance from the nearest health institution in non beneficiaries of CBHI were significant predictors for utilization of health services.

8.2. Recommendations

- **Ethiopian health insurance institute:** Since there was higher utilization level of health services among beneficiaries of CBHI
  - Further coverage of the health insurance specifically focusing those households with lower (least poor) household wealth status by considering subsidizing costs of the insurance or other indirect health care costs.
  - Regulations on over utilization of this scarce resource on health care may be better if considered.
  - Further scaling up of the CBHI to communities with similar socioeconomic settings
- **Oromia Regional Health Bureau:**
  - Improving utilization of health services through strengethening the CBHI

- Ensuring the physicaly accessibility and affordability of health services specially in addressing those households with lower household wealth status in both non beneficiaries and beneficiaries of CBHI.

- **The woreda administration and health office:**
  - The woreda administration needs to facilitate and coordinate CBHI coverage, infrastructures like road and transport which makes easily accessiblity of health services by the community to receive health services needed on time. This clearly indicates that improving physical accessibility of health services will possibly result in a better utilization of health care.
  - The woreda health office needs to increase the awareness of the community on appropriate utilization of health services specifically detecting health conditions early and timely visit of health institution for their illnesses.
- **Researchers**: This research assessed only some factors related to demand side on health service utilization among beneficiaries and non beneficiaries of CBHI.
  - Further research is needed on provider side: the interaction of provider and users of the health services in relation to CBHI, adverse selection and matching of cases on health services use are possible research areas.

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Annexes

English Questionnaire

Questionnaire to assess utilization of health services among beneficiaries and non-beneficiaries of community health insurance in Ginbichu district.

Introduction

Greeting: Good morning/Good afternoon .Thank you for taking the time to provide answers to this questionnaire.

My name is _____I am here today as a data collector of a study conducted by college of Public health and medical Sciences, Jimma University. We are asking some questions on utilization of health care services. If you are willing yours is one of the households we are asking randomly.

Whatever we ask you and get as a response will be confidential. Please remember there is no right and wrong answers to the questions only correct information is needed .Your name will not be written on this paper. Information about your family and your compound will be told to nobody. It will be used only for the study purpose. So would you participate in our study?

If yes you can proceed to the next page.

If No go to the next house.

A .Questionnaire for household survey.

*Enumerator:please fill the number or the answer inside boxes or prepared spaces.**NB**.remeber to use numbers if the answer is yes=1 and no=0*

1. Questionnaire Identification number (1=beneficiary of CBHI,2=non beneficiary of CBHI) 1or2_____

2.Identification code_____

3. Kebele _____

4. Gote _____

4. House number._____

Serial no	Question/variable	Response		SKIP
Part 1 Socio demographic characteristics . Household means all those people living in the same place and sharing in the household costs as food/rent etc. *Enumerator: Only the head of the household should be interviewed or in his/her absence the spouse should be interviewed or another adult income earner age greater than 18 yrs*				
101	Sex of respondent (Household head/spouse)	1.Husband , 2.wife 3.male head of hh 4.female head of hh		
102	How much is age of the respondent?	_____years		
103	How many are your household members including the respondent?	_____number		
104	How many in your house in each age group in the bracket including the respondent?	1____(0- 1 year), 2____(2 year to 4 years)., 3____(5years- 18years), 4____(18 years -63 yrs old),5 ____(64 and older)		
105	What is your marital status?	1. Not married 2.Married 3. Separated /divorced, 4.Widowed (er)		
106	How many children do you have?	_____in number		

107	What is your religion?	1. Orthodox, 2. Protestant, 3.Catholic 4.Muslim , 5.Other specify_____		
108	What is your ethnicity?	1.Oromo, 2.Amhara , 3.Tigre ,4.Other specify_____		
109	What is your highest level of education?	1.No education , 2.Only able to read and write, 3.Grade 1-8, 4.Grade 9-10 5.grade 10-12, 6.Certificate holder 7.Diploma holder , 8.Degree and above holder		
110	How long have you been living here?	_____years		
Part 2 Socio-economic status				
201	Are you the main bread winner /earner of the household?	1=Yes ,0=.No		⊣► 203
202	If no "Q-201"Which one is your household main bread winner?	1. Your spouse, 2.Your son/ daughter/ brother/sister/ other relative, 3. Other support_____		
203	Whose is the house you are living in?	1.private 2.government 3.rent from private		
204	The roof of the house	1. Thatched 2. Corrugated iron sheet 3. Plastic 4.Other, specify_____		
205	The floor of the house	1. Soil 2. Cement 3. Other, specify_____		
206	The wall of the house	1. Mud & wood 2. Cement and Stone 3. Others, specify –		
207	The number of rooms of your house	1.one 2.two 3.three 4.four and above		
208	Do you have electricity for light?	1.=yes,0=no		
209	Where is the kitchen /cooking place??	1. Inside the room 2. Separate kitchen 3.open field 4 .other, specify		
210	What type of fuel you used for cooking?	1. Wood 2. Charcoal 3.Kerosin 4. Animal dung 5.other____		
211	What is the occupation of head of household?	1.Farmer , 2.Merchant , 3.House wife , 4.Government employee , 5.Other,Specify _____		
212	Which of the following are owned by you?	1.Radio, 2.Television, 3.refrigerator, 4.bycicle 5. Motorcycle 6.phone 7.horse/donkey driven cart 8. Car 9.others,specify_____		
213	Does any member of this household own any land that can be used for agriculture?	1=yes, 0=no		⊣► 216
214	If yes "Q 213" how much in local	In number_____		

	unit?(hectare)					
215	If yes "Q 213" by what are you cultivating?	1. Oxen 2.tractor car 3. Tractor moterized hand driven 4.other__				
216	I will read the list of different source of income, please tell me if you or your household member earns any of your money from the following sources in the past 12 months.	1. Permanent job/formal employment 2. Sale of any goods other than agricultural produce 3. Provision of any services (renting houses, car, land, livestock, equipment, traditional healing etc) 4. Agricultural production 5. Livestock breeding 6. Pension 7. Money from government 8. Money received on regular basis from somebody living and working inside Ethiopia 9. Money received on regular basis from somebody living and working outside Ethiopia 10. other_____				
217	What is your households' total estimated expenditure? *(More than one answer is possible).*	1.Every week_____ in Birr 2.Every second week _____in Birr 3.Monthly _____in Birr 4.Every six month_____ in Birr 5.Occasional _____in Birr 6.Yearly _____in Birr				
218	If the food items that your house hold produced, but also consumed in the past six month were bought from the market, how much will they cost?(kg)	Items	Quantity in kg	Price in birr per month		
		Teff				
		Wheat				
		Barely				
		Maize				
		Beans				
		Sorghum				
		Millet				
		Other---				
		total				
219	How often and how much do your household spends on the following non food consumption items in last six months?	Livestock inputs				
		Transport expenses				
		Clothing				
		Agricultural inputs				
		Durable goods				
		Medical				

		Expenses				
		Housing (rent, repair etc.				
		Transport fee				
		Utilities				
		Other expenses				
		Total				
220	What is the main source of drinking water for members of your house hold? More than on answer is possible.	1.Piped water in to dwelling 2.Piped water to compound 3.Piped water outside the compound 4. tube well 5.Protected well 6.Unprotected well 7.Rain water 8.River /surface water 9.protected spring 10.Lake 11.0ther speccify_____				
221	What is the main source of water used by your household for other purposes such as cooking and hand washing? More than on answer is possible.	1.Piped water in to dwelling 2.Piped water to compound 3.Piped water outside the compound 4. tube well 5.Protected well 6.Unprotected well 7.Rain water 8.River /surface water 9.protected spring 10.Lake 11.0ther speccify_____				
222	Do you have an toilet facility that you and your household member usually use?	1=yes , 0=No				→ 0 224
223	What kind of toilet facility do members of your household usually use?	1.flush or pour toilet 2.pit latrine improved 3.latrine not improved 4.other_____				
224	Number of livestock owned by your household in this year.	1.Sheep_____ 2.Cows_____ 3.Goat_____ 4.Chicken_____ 5.Donkey_____ 6.Horse____				

		7.Mule____ 8.others_____ 9.None_____			
225	Amount of agricultural products collected in this production year in quintal (100kg)	1.Teff_____ 2.Wheat _____ 3.Barley _____ 4 Corn _____ 5 .Beans _____ 6.Onions_____ 7.Tomato_____ 8.Potato_____ 9.Other identify_____ 10.none_____			
Part 3- household health status and health care delivery related factors					
301	Self rated (perceived) health status at the moment	1. Excellent 2.Very good 3.good 4.fair 5.poor			
302	Perceived severity of illness or injury.of household members who were ill or injured in the past 30 days	1.Sligh 2.Moderate 3.Serious			
303	Household members who were ill or injured in the past 30 days if sought a first, second, and a third treatment.	1.first treatment 2.second treatment 3.third treatment 4.more than third treatment			
304	Have you/your house hold members become ill/injured in previous 12 months?	1=Yes 0=No			
305	Sex of who become ill/injured in last 12 months	1. Male 2.female			
306	Age who of become ill/injured in last 12 months	------ months/yrs			
307	How can you rate your illness/injured in previous 12 months?	1. Severe 2. medium 3.slight			
308	Have you/your household member faced perceived severe illness/injured in previous 12 months?	1=yes, 0=no			0 310
309	Did the severe illness/injured in previous 12 months resulted in stopping your work?	1=yes, 0=no			
310	If "q307" is yes, How many times you/your household member faced perceived severe illness/injured in previous 12 months?	1. Once 2.two times 3.three times 4. More than three times			
311	Have you/your household member visited health institution/professional for the illness/injured in previous 12 months?	1=yes, 0=no			

312	Which type illness episodes you and/or your family faced for the period previous 12 month?	1.Acute(<2weeks), 2.Chronic(>3weeks) 3.Minor ailment, 4.Major ailment		
313	When you visited the doctor/health professional, did he/she perform physical examination?	1=yes, 0=no		
314	During you last visit how long was the waiting time to get the treatment as your perception?	1.very long 2.good		
315	If "Q311" yes how many times you visited?	In number_____		
316	Have you/your household member been admitted in hospital/ health institution for the illness/injury in previous 12 months?	1=yes, 0=no		
317	If yes to "Q316" for how many days	Days_____		
318	If yes to "Q316" who paid for the inpatient service?	1. Free 2.all self 3. Some insurance, some self 4.insurance 5.other specify_____		
319	If on "Q316" you have paid, how much was it?	_____birr		
320	From the list which type of health conditions of the household member made you to visit health institution during past 12 months? *(More than one answer is possible.)* Yes=1,No=0			
		1.Malaria		
		2. Diarrhoea		
		3.Fighting injury		
		4.Accident other than fighting		
		7. Respiratory diseases		
		8. ANC		
		9.Childbirth		
		10.Others(specify)----------		
321	Which health institution have you visited during your illness in the previous 12 months?	1. Hospital, 2.Health centre 3.health post/clinic 4. Private health facility, 5. traditional healer 6. drug vendor, 7.non, 8.other_____		
322	Why you chose where you have visited?	1. ☐ treats with courtesy and respect 2☐ Near 3. ☐ Cheap 4.☐ Had full equipment 5. Others _____		
323	How many visits you made during your illness in the previous 12 months?	1.once, 2.twice, 3.three times 4.four times or more		
324	What is the minimum time interval between current and last visit?	1.< 1month, 2.1-3month, 3.4-5month 4.6month or more		

325	Which health services are priorities for you? Please put in order of priority, from 1 to 5, 1 being most important.	___Maternal and child healthcare services ___Domestic violence prevention ____Alternative medicine (traditional healers, religious practice, etc) ____Information and referral ____community health services by health extention workers ____Other: _____				
326	For which of the following cases you think you should visit health institution? More than one answer is possible. Yes=1,No=0	1.☐ Malaria2.☐ Diarrhea 3.☐ Antenatal 4. ☐ For delivery 5.☐ Injury 6. Hypertension 7.☐ Diabetic 8. ☐Pediatric care 9☐ Family planning 10. others				
327	How satisfied or dissatisfied were you with the overall health care available to you during visiting before the past 12months (one year) ? 1=very disagree,2=disagree ,3 =neutral, 4=agree,5=very agree	1.☐ health professionals treated us with courtesy and respect 2. ☐ The compound was clean 3. ☐ We accessed all drugs from the health institution. 4. ☐ We have information on side effect and importance of the drug 5. ☐Easily we found all places in the compound 6. ☐ To get the treatment it took short time.				
328	How do you rate generally the quality of health care that you get from the health facility before (12 months) one year?	1.Poor, 2.Good 3.Very good				
329	Compared to 2 years ago, is it easier, harder, or about the same to get good healthcare when you need it?	1.Easier , 2.Harder 3.About the same 4.I don't know				
330	Is any person died during last one year/ the previous 12 months from your household?	1=Yes, M___ Age___No____ ____ ____ ___ F___ Age___ No_____ ___ ___ _____ 0= No				
331	If yes to "Q328" What was the cause of the death(s)? (*More than one answer is possible*) If yes=1, No=0 for each answer.		Yes	No		
		1. Fighting				
		2. Accident other than fighting				
		3. Suicide				
		4.Malaria				
		5.Diarrhoea				
		6.Respiratory disease				
		7.During pregnancy / child birth				
		8.Others _____				

332	If yes to "Q328" Did he/she visit hospital/health centre/post?	1=Yes,0=No		
333	If no "Q330" Reasons for not taking people to health institution for the disease that killed them. Yes=1,No=0,for each answer	1. ☐ Disease's fast course 2. ☐ Assumed patient would not benefit from modern health services 3. ☐ Lack of money for transport 4 ☐.Health Institution far from home 5. ☐ Refusal of patient, 6. ☐ Accident 7. ☐ No body helped to take him to health institutions, 8. ☐ Suicide 9. ☐ used holy water 10. ☐ Reason not given 11.other____		
334	Have you had any illness/injury preeciding two weeks?	1=Yes, 0=No		
335	Have you visited modern health care institutions during your/your household illiness preceeding two weeks month?	1.Yes , 0=No		
336	If No to "Q333" Reasons for not visiting modern health institutions by people who perceived themselves sick during the two weeks preceding the survey	1. ☐ Shortage of money 2. ☐ Believed their diseases did not need treatment in health institutions 3 ☐. Bought drugs from drug vendors, 4. ☐ Visited traditional healers 5. ☐ Used holy water 6. ☐ Visited local injectors 7 ☐.No reasons given 8. Other specify-------		
337	Did you visit with a practitioner of alternative or traditional medicine in the past 12 months?	1=Yes 0=No		
4.Health care related				
401	Main strategy used to pay for health care services during last illness	1.Health insurance, 2. Savings 3. Sales of agricultural output, 4.Loan from relatives, 5. Sale of agricultural asset (livestock) 6. Sale of non-agricultural asset (equipment, vehicle)		
402	Perceived treatment cost	1. Cheap, 2. Medium, 3. Expensive		
403	How much was the total treatment cost of previous 12 month?	_____birr		
404	Travel time to the nearest Health Centre or Hospital on foot	1. Less than half an hour, 2. Half to one hour 3. One to two hours(<=10km), 4. Two hours to three hours (>10km) 5. More than three hours		
405	Distance from nearest health institution in km	1.<10, 2.=10, 3.>10		

406	Perceived distance from nearest health institution	1.near, 2.medium, 3.far		
407	Transport cost spent during last illness to receive health care services	1.----------in birr 2. No transport cost		
408	Total perceived transport cost	1. Cheap, 2. Medium, 3. expensive		
409	Total food and other utility costs spent when visiting health institution during last illness	------Birr		
	5. CBHI			
501	Do you know about CBHI?	1.yes, 2.No		
502	If yes to "Q501, which explains it?	1.prepayement for health care, 2.paying tax for govt, 3.free health delivery by govt		
503	From which one of the following you got the awareness?	1. Neighbor 2.radio/Tv 3.training in the kebele 4. Discussion with health development army 5.newsletters/pamphlets 6.others_____		
504	Do you think that the community-based health insurance (CBHI) can benefit you and your family members?	1=Yes 0=No		
505	Do you have previously micro group/saving used for health care cost?	1=Yes, 0=No		
506	Are you now the member of community based health insurance?	1=Yes 0=No		
507	How much is the single payment of the scheme of CBHI?	_____birr		
508	For which purpose can you use your paid money of the insurance?	1. For treatment cost and drugs 2. for whole household registered as members of CBHI 3 .transport cost when referred 4. Food cost when visiting health institution. 5. Others_____		
509	If yes on "Q506" what is your reason to be enrolled in CBHI?	1.financial protection against illiness/injury 2. it is better than OOP 3.my neghbour told me to join 4.a relative asked me to join 5. community leaders informed me to join 6.other ,specify---------		
510	If you are the member of CBHI,how can you rate the quality of using existing CBHI?	1.Excellent, 2.Satisfactory 3.Poor		
511	Do you trust the CBHI committee?	1=Yes, 0=No		
512	Have you renewed your Insurance membership card?	1=Yes, 0=No		

513	If you had been a member but have not renewed now, what is your reason?	1.Unable to pay renewal payement 2.not satisfied with provider, 3.facility too far 4.no transport money, 5.inconvinient timing of payement, 6.nobody was sick last year 7.others, specify--------		
514	If no to "Q512" Will you renew next time?	1=Yes,0=No		
515	If you have been not a member, what is your reason for not being member of CBHI /enrolling?	1.cannot afford premiums 2.mostly health do not need it 3.no close health facility in the area 4.has no confidence in the scheme 5.registration point too far 6.employers pay my health care cost 7.others,specify-------		
516	If you don't have any awareness of CBHI how do you went to know	1. Neighbor 2.radio/Tv 3.training in the kebele 4. Discussion with health development army 5.newsletters/pamphlets 6.others_____		
517	If you have been not member, Are you willing to join the existing community based health insurance?	1.Yes 2. No		
518	If you decided to join the existing CBHI, what is the most preferred time for you to make contribution (payment)	1.Weekly, 2.Monthly, 3.Every three month 4.Every Six month, 5.Annually		
519	What is your perceived yearly premium cost of the CBH scheme?	1.cheap , 2.medium, 3.expensive		

Thank you!

Enumerator**:** Record the time at which the interview ended _____

In-depth interview guide

Instruction for data collectors:

First you will find the informed consent. Please make sure that all the stated sections & questions are present, and read (inform verbally) the consent for the interviewee before beginning the interview. Please write each response briefly.

Informed Consent Form

My name is _____. I am here today as a data collector of a study conducted by college of Public health and medical Sciences, Jimma University. We are asking some questions on utilization of health care services and health insurance and related factors.

During the interview you will be asked some short questions about your background, health service utilization and associated factors. Your answers will be recorded. No personal identifiers will be attached recorded to the interview. All the data obtained will be kept strictly confidential by using only code numbers, and destroyed immediately when the study is finalized.

Your participation in the study is upon voluntary basis. What we learn from this study will be used to generate information. The interview will be conducted in private and will take 30-40 minutes. During the interview (discussion) period, if you feel inconvenient, you can interrupt and clarify inconvenience, appoint to other time or even withdraw any time after you get involved in the study. Your honest and genuine participation in responding to the questions prepared is very important & highly appreciated. If you agree to participate in this study I will interview you.

Would you be willing to participate? If yes, proceed. If no, thank and stop here.

If you need any further information about the study, please contact the following person(s)

Zerihun Ayenew Tel. Number 0912119530……principal investigator

_____ (Signature of interviewer certifying that respondent has given Informed Consent verbally).

B- In-depth interview guide for Health Facility leaders

1 What are the common health problems in your community (catchment area)? List five top diseases-HMIS

2 What is peoples priority of health seeking behavior in this area? (traditional, pharmacy,private clinic or public health service)

3 What are the problems related to utilization of health services in this area?

- ✓ Probe-utilization pattern of the community in this two years between members and non members?
- ✓ Access of health services to the community(distance,health professionals)
- ✓ Payement system ,etc

4. How can you prioritize these problems depending on their severity.

5. What are the root causes related to these problem?

6. Can all individual in your community use health care services when they become ill? If No, what are the reasons?

7. What factors are affecting the utilization health care services? Increasing or decreasing utilization pattern of both members and non members oo CBHI?

8. What payment mechanism are most of the community using for health care services in your area?(out of pocket,free service,CBHI)

9. What was the general health care utilization behaivior during CBHI enrolment?

Probe on, members treated differently from members in waiting time, price differences of the same services(cheaper), free treatment, good facilities (bed), availability of drugs, trust (in personnel) etc.

10. How can you describe the similarity on recieving health services between beneficiaries and non-beneficiaries of CBHI?

11. How can you describe the difference on receiving health services among beneficiaries and non-beneficiaries of CBHI?

12. What are the perception of the local people toward the CBHI and their expectation of it? Both members and non members.Probe-awareness, attitude toward the CBHI or health services, to continue or willingness to join the CBHI.

13. Is there any difference in the approach of services provision by the health facility to the CBHI enrolled and non-enrolled people? Any assigned personnel for CBHI member clients? How can you identify the members?

14.How can you describe the positive and negative aspects related to CBHI members in health service provision in your institution?

15. Do you feel any lacking in the benefit packages? Any change over time

16. How are the needs of the poor/disadvantages taken in to consideration with CBHI program?

17. What are main problems related to utilization of fund generated from the premiums? Probe-Is there managerial freedom to use ? in the health institution. Eg. incentives for staff?

18. What do you think the alignmet of CBHI with other government programs?

19. How can you describe the sustainability of CBHI ?

Probe- price, trust, time of payement by community,reimbursement for health institutions, benefit packages etc.

20. What activities should be done to sustain the insurance system?

(payement, utilization of both health care and the insurance)

21.Do you suggest that if CBHI scheme is replicated to other places? If yes do you suggest any modification?

C- In-depth interview guide for CBHI committee leader/ HDA representatives

1 What are the common health problems in your community? List minimum of five main diseases

2 What is peoples priority of health seeking behavior in this area? (traditional, pharmacy,private clinic or public health service)

3 What are the problems related to utilization of health services in this area?

- ✓ Probe-utilization pattern of the community in this two years between members and non members?
- ✓ Access of health services to the community(distance,health professionals, medicines, others)
- ✓ Payement system ,etc

4. How can you prioritize these stated problems depending on their severity?

5. What are the root causes related to these problem?

6. Can all individual in your community use health care services when they become ill? If No, what are the reasons?

7. What factors are affecting the utilization health care services? Increasing or decreasing utilization pattern of both members and non members oo CBHI?

8. What payment mechanism are most of the community using for health care services in your area?(out of pocket,free service,CBHI)

9. What was the general health care utilization behaivior during CBHI enrolment?

Probe on: members treated differently, in waiting time, price differences of the same services(cheaper), free treatment, good facilities (bed), availability of drugs, trust (in personnel) etc.

10. How can you describe the similarity on recieving health services between beneficiaries and non-beneficiaries of CBHI?

11. How can you describe the difference on receiving health services among beneficiaries and non-beneficiaries of CBHI?

12. What are the perception of the local people toward the CBHI and their expectation of it? Both members and non members.

Probe on: awareness, attitude toward the CBHI or health services, to continue or willingness to join the CBHI.

13. Is there any difference in the approach of services provision by the health facilities to the CBHI enrolled and non-enrolled people? Any assigned personnel for CBHI member clients?

14.How can you describe the positive and negative aspects related to CBHI members in health service utilization of your area?

15. Do you feel any lacking in the benefit packages? Any change over time?

16. What are the main problems related to collection of premiums?

17. What mechanism do you have to insure that the health facilty keeps its contractual obligation toward CBHI members? Reports/feed backs from health institution, members compliant and solution mechanism?

18. What do you think the alignmet of CBHI with other government programs?

19. How can you describe the sustainability of CBHI ?

Probe- price, trust, time of payement by community, reimbursement for health institutions, benefits packages etc.

20. What activities should be done to sustain the insurance system?

(Payement, utilization of both health care and the insurance)

21.Do you suggest that if CBHI scheme is replicated to other places? If yes do you suggest any modification?

Gaafannoo Afaan Oromoo

Gaafannoo qo'annoo itti fayyadama tajaajila fayyaa miseensotaa fi mit-miseensa insuuraansii fayyaa hawaasaa gaggeessuuf oolu , Aanaa Ginbichuu

Seensa

Nagaa gafachuu: Akkam bultan/ooltan. Gaafannoo kana deebisuuf yeroo fudhachuu keessaniif galatoomaa.

Maqaan koo_____jedhama. Ani hara'a asitti argamuun koo qo'annoo kollejjii fayyaa hawaasaa fi medikaal saayinsii ,Yuunivarsiitii Jimmaatiin gaggefamuuf dataa sassaabuufi. Nuti gaaffii muraasa itti fayyadama tajaajila fayyaa irratti isin gaafanna. Yoo fedha keessan ta'e , kan keessan gaaffii manaa-mana carran gaafannu keessaa isa tokko.

Gaaffiin isin gaafannu hundaaf deebii isin kennitan icciitiin qabama.Deebiin sirrii ykn dogogora ta'e hin jiru garuu ragaa sirrii ta'e qofatu barbaadama.Maqaan keessan waraqaa kana irratti hin barreefamu. Odeefannoon (informeeshiniin) maatii fi mana keessaniiykn dallaa keessanii nama biraatti hin himamu.Kaayyoo qo'annoof qofq oola. Kanaafuu qo'annoo kana keessatti ni hirmaattu?

Yoo eeyyee fedha qaba ta'e, itti fufi._____

Yoo hin ta'u fedha hin qabu ta'e, mana itti aanuutti darbi._____

A.Gaafannoo Warra Manaaf Oolu

Ajaja gaaffiiwwanii: *Lakkoofsa deebii sirrii kennaman sanduuqa ykn bakka qophaye* ***HUNDA*** *keessatti guuti.****HUB;*** *deebiin yoo* ***eeyyee=1,miti/lakki=0*** *guutuu hin dagatiin.*

1.Dhibee/dhukkuba maatii keessan keessaa mudate ture._____

2.Lakk koodii_____3.Lakk koodii gaafannoo(1=miseensa IFH,2=mit-miseensa IFH),1 ykn 2_____

4.Ganda_____5.Gooxii/garee_____6.lakk manaa_____

lakk	Gaaffiiwwan	Deebbiiwwan	D
Kutaal Ibsa Hawaassummaa. Warra manaa/maatii jechuun namoota man tokko keessa waliin jiraatan fi baasii manaa,nyaata, Kkf, qooddatan hunda. ***Gaafataan:*** *deebii kan kennuu qabu hooganaa maatii bakka inni/isheen hin jirrettiabbaa/haadha warraa ykn galii ijoo maatiif kan argamsiisu umuriin isaa waggaa 18 ol dha.*			
101	Saala deebii kennaa jiruu(Hoogganaa warra manaa/Abbaa warraa/Haadha warraa)	1.Abbaa warraa 2.Haadha warraa 3. Hoogganaa warra manaa dhiira 4.hoogganaa warra manaa dubara.	
102	Umuriin keessan waggaa meeqa?	Waggaadhaan_____	
103	Miseensi warra manaa isiniin dabalatee meeqa?	Lakkofsaan_____	
104	Miseensi warra manaa isin dabalatee waggaa qoodame kanaan meeqa?	**1**.___waggaa 0-1,**2.**___waggaa2-4, **3**.___waggaa 5-18,**4**.___waggaa19-63,**5**.___waggaa64 fi isaa ol	
105	Haalli gaa'elaa keessan akkami?	1.Kan hin fuune 2.Kan fuudhe/heerumte 3.irraa du'e/duute 4.wal hiikan.	
106	Ijoolleen keessan meeqa?	Lakkoofsaan_____	
107	Amantaan keessan maali?	1.Ortoodoksii 2.Prootestaantii,3.Musliima 4.Kaatolika 5. kan biraa__	

108	Sabummaan keessan maali?	1.Oromoo 2.Amaara 3.Tigree 4.kan biraa_____	
109	Sadarkaan barumsaa olaanaa xumurtan kami?	1.barumsa hin qabu 2.dubbisuu fi barreessuu danda'a.3.Kutl-8,4.kut.9-10,5.kut.11-12,6.sartifikeeta,7.Dippiloomaa,8.digrii fi ol	
110	Waggaa meeqa erga as jiraachuu jalqabdanii?	Waggaan_____	
Kutaa2 Haala Hawaasummaa fi Qabeenya maatii			
201	Maatii keessaniif galii isa ol aanaa /ijoo kan argamsiisu isini?	1=eeyyee,2=lakki	→ 203
202	Yoo "G-201" lakki ta'e isa/ishee kamtu maatii keessaniif galii ijoo argamsiisa?	1.abbaa/haadha manaa 2.Mucaadhiiraa/dubaraa/oboleessa/oboleettii/fira biraa 3.garbiraa___	
203	Manni isin keessa jiraattan kun kan eenyuuti?	1.kan dhuunfaa2.kan mootummaa3.kiraa kan nama dhuunfaa	
204	Baaxiin/qooxxiin mana isaanii maali?	1.citaa/daggala 2.qorqoorroo 3.pilaastikii4.kan biraa____	
205	Lafti mana isaanii maali?	1.biyyoo2.simmintoo3.kan biraa_____	
206	Keenyan/gidgiddaan mana isaanii maali?	1.dhoqqee fi muka 2. Simmintoo fi dhagaa 3.kan biraa_____	
207	Manni keessan kutaa meeqa qaba?	1.tokko 2.lama 3.sadii 4.afurii fi isaa oli_____	
208	Ibsaa elektirikii qabdu?	1=eeyyee,0=lakki	
209	Bakki itti bilcheeffatan (kushinaa) eessa?	1.manuma keessa 2.adda ba'eera 3.alatti 4. Kan biraa____	
210	Nyaata maaliin bilcheefatu?	1. muka/qoraan 2. Kasala 3.gaazii/keroosinii 5.dhoqqee horii goge 6. Kan biraa___	
211	Hojiin hoogganaa maatii keessanii maali? Deebii tokkoo ol danda'ama. Eeyyee=1,lakki=0	1 ☐ Qotee bulaa 2 ☐ daldalaa 3 ☐ Haadha warraa 4 ☐ Hojjetaa mootummaa 5.barataa 6. Kan biraa____	
212	Kan itti aanutti ibsaman keessaa mana keessanii maal qabdu? Deebii tokkoo ol danda'ama 1=eeyyee, 0=miti0	1 ☐ raadiyoo 2. ☐ Televivsinii 3 ☐ Rifrigiretara/diilalleessa 4. ☐ Saaykilii 5. ☐ Motar saaykilii 6. ☐ Bilbila 7. ☐ Gaarii fardaan/ harreen harkifamu 8 ☐ Konkolaataa manaa/fe'isaa 9. Kan bira-	
213	Maatii keessan keessaa lafa qotisaa kan qabu jiraa?	1=eeyyee,0=lakki	→ 216
214	Yoo "213" eeyyee ta'e , hektaara/safartuu isaaniin meeqa ta'a?	lakkoofsaan_____	
215	Yoo '213" eeyyee ta'e maaliin qottu?	1 ☐ sangaan 2 . ☐ jiraakteraa konkolaataa 3. ☐ Tiraaktera motoraa fi harkaanii 4. Kan biraa_____	
216	Tartiiba madda galii isiniif dubbisa, ,isin ykn miseensi maatii keessanii galii qarshii kan armaan gadii keessaa ji'a 12 darban keessatti argattaniittu yoo ta'e .deebiin tokkoo ol danda'ama. 1=eeyyee,0=lakki	1 ☐ Hojii /qacarrii dhaabbataa 2. ☐ gurgurtaa meesghaalee kan qonnaa hin ta'iin 3 ☐ ajaajila hunda (mana, konkolaataa'lafa, beellada, kireessuun,yaalii aadaa, KKF) 4 ☐ Galii qonnaa 5. ☐ Horsiisa beelladaa. 6 ☐ Qarshii mootummaa 7 ☐ Soorumaa 8 ☐ Qarshii nama biraa itiyoophiyaa keessa jiru irraa 9. ☐ Qarshii nama biraa itiyoophiyaa ala jiru irraa 10. Kan biraa_____	
217	Baasiin walii gala maatii keessanii yeroo tilmaamamu ammami?deebiintokko ol danda'ama) .	1.Torban torbaniin qarshii____2.Torban lama lamaan qarshii__ 3.Ji'a ji'aan qarsh_____4.Ji'a jaha jahaan qarsh_____ 5.Darbee darbee____ 6.Waggaa waggaan_____	
218	Yoo gosa nyaataa maatiin keessan haa oomishan malee,garuu ji'a tokko darbe keessatti kan fayyadamtan gabaadhaa kan bitaman yoo ta'e gatiin isaanii hangamiin bittan?	Gosa / Baay'ina / Gatii/Q.ji'aan	
		Xaafii	
		Qamadii	
		Garbuu	
		Boqqolloo	
		Baaqelaa	

		Boobee			
		Daagujjaa /millet			
		Garbiraa _____			
		Wallii gala			
219	Yeroo hammamii fi hammam maatiin keessan baasii gosa nyaataa hin ta'iiniif baastu?	Beelladaaf			
		Baasii geejibaa			
		Uffataaf			
		Qonnaaf			
		Meeshaa dhaabbataaf			
		Baasii yaalaaf			
		Manaf (kiraaf,ibsaa,bishaan,kkf)			
		Tajaajila bishaan,ibsaa,kkf			
		Walii gala			→
220	Bishaan dhugaatii maatii keesaaniif eessaa argattu?1=eeyyee,0=lakki	1☐.Boonbaa bishaan mana keessaa 2 ☐ Boonbaa dallaa jireenyaa keessaa 3 ☐ boonbaa dalla alaa 4☐ Bishaan boollaa tubboo qabu.5☐ .boolla bishanii itti ijaarame 6☐ . Boolla bishaanii itti hin ijaaramiin 7.☐ Bishaan roobaa 8☐ laga burqaa hin ta'iin 9.☐ Burqaa laga dallaa qabu 10.☐ haroo 11.kan biraa____			
221	Bishaan hojii mana keessaaf nyaata qopheessuu fi harka dhiqachuuf maatiin keessan eessaa argattu?	1.☐.Boonbaa bishaan mana keessaa 2 ☐. Boonbaa dallaa jireenyaa keessaa 3.☐boonbaa dalla alaa 4. ☐Bishaan boollaa tubboo qabu. 5 ☐ boolla bishanii itti ijaarame 6 ☐ .Boolla bishaanii itti hin ijaaramiin 7☐ Bishaan roobaa 8☐. laga burqaa hin ta'iin 9 ☐ Burqaa laga dallaa qabu 10.☐ haroo 11. kan biraa____			
222	Mana fincaanii qabdu?	1=eeyyee,0=lakki			→ 224
223	Yoo "222" eeyyee ta'e isa akkamiiti?	1. bishaan itti naqamu kan qabu 2.manni kan itti ijaarame 3.manni itti kan hin ijaaramiin 4. Kan biraa_			
224	Baay'ina beelladoota maatiin keessan wagga kan a keessa qabdan	1.Hoolaa___2.Saawwan____3.Re'ee____4.Lukkuu____ 5.Harree___6.Farda___7.gaangee___8.garbiraa___9.Hin jiru			
225	Baay'ina galii oomisha qonna irraa waggaa kana sassaabdattan kuntaalaan(100kg)	1.Xaafii___2.Qamadii_____3.Garbuu____4.Boqqolloo____5.Baaqelaa_ ___6.qullubbii_____7.timaatima____8.dinnicha____9.Garbiraa____1 0. Homtuu hin jiru___			
Kutaa 3- Fayyaa maatii fi kenna tajaajila fayyaa wajjin haalota wal qabatan					
300	Umuriin miseensa dhibee/miidhaan ji'a 12 darbettiit yeroo dhihoo mudatee	_____ji'aan/waggaan			
301	Saala miseensa dhibee/miidhaan ji'a 12 darbettiit yeroo dhihoo mudatee	1.dhiira 2.dubartii			
302	Yeroo ammaa fayyummaa keessan akkamitti hubattan/sadarkaa kam kennitu?	1.baay'ee baay'ee gaarii dha 2.baayy'ee garii dha 3.gaarii 4.wayyaa 5.dhibameera.			
303	Akkaataa sadarkaa dhukubaa/Miidhaa isaniitiin miseensa maatii guyyaa 30 darban keessatti dhukubsatan ykn miidhaan irra gahe	1.Salphaa 2.Gidduu galeessa 3.Cimaa			
304	Miseensa maatii guyyaa 30 darban keessatti dhukubsatan ykn miidhaan irra gahe akkaataa miidhaa isaniitiin irra gahe yaalii yeroo 1^{ffaa}, 2^{ffaa} fi 3^{ffaa} argatan	1.,yaali 1ffaa 2, yaalii 2ffaa 3,yaalii 3ffaa fi isaa ol			
305	Dhukkuba isin ykn miidhaan maatii keessa irra ji'a 12 darbetti keessatti mudateera?	1=eeyyee,0=lakki			
306	Dhukkuba/ miidhaan isin ykn maatii keessa irra ji'a 12 darbetti keessatti mudate sadarkaan isaa akkamitti hubattu?	1.Cimaa 2.salphaa			
307	Dhukkubni/miidhan cimaan maatii keessan ji'a 12darbetti keessatti	1=eeyyee , 0=lakki			

	mudatera?		
308	Dhukkubni/miidhaan cimaan qaama isin irra gahee hojii irraa hambise jira?	1=eeyyee , 0=lakki	→ 31 0
309	Yoo"306" dhukkubiin cimman yeroo hammamiif isin ykn maatii keessan irra ji'a 12 darbe mana yaalaa ykn ogeessa yaalaa bira deemtanii ture?	1.yeroo tokko 2.yeroo lama 3. Yeroo sadii 4. Yeroo sadii ol.	
310	Dhukkuba isin ykn maatii keessan irra ji'a 12 darbe keessatti isin mudateef mana yaalaa/ogeessa yaalaa bira deemtaniii ture?	1=eeyyee, 0=lakki	
311	Dhukuba /miidhaan Yeroo Hangam turetu ji'a 12 darbe keessa isin ykn maatii mudate	1.Torban 2 gadi 2. Torban 3 ol 3.Dhibee salphaa yeroo dheeraa 4. Dhibee dcimaa yeroo dheeraa.	
312	Yeroo keemtan ogeessi fayyaa qorannoo qaamaa/PE/ isinii godhame?	1=eeyyee, 0=lakki	
313	Yeroo turee yeroon yaalii argachuuf eegaa turtan akkami?	1.baay'ee dheeraa 2. Gaarii dha.	
314	Yoo*310* eeyyee ta'e yeroo meeqaaf deemtan?	Lakkoofsaan_____	
315	Dhukkuba isin ykn maatii keessan irra ji'a 12 darbe keessatti isin mudatee tureef hospitaala/ mana yaalaatti ciistanii yaalamtanii beektu?	1=eeyyee, 0=lakki	
316	Yoo "312"f eeyyee ta'e, guyyaa meeqaaf?	Guyyaa_____	
317	Yoo "312"f eeyyee ta'e, gatii tajaajila yaalii ciisanii yaalamu eenyutu kaffale	1.Tola 2.Hundi insuuraansiin 3. Walakka isin,walakkaa inshuuraansii. 4. Insuuraansiin 5.garbiraa__	
318	Yoo "312"f isin tu kaffale yoo ta'e, qarshii meeqa?	Qarshii_____	
319	Tartiiba tajaajila fayya kanneen keessaa isa kamtu miseensa maateii kessa nii akka mana yaalii deemtaniif ji'a 12 darban keessatti isin mudate/ debiin tokkoo ol danda'ama, eeyye=1 lakki=0	1. . ☐ busaa 2 ☐. Garaa kaasaa 3 ☐Balaa wal looluu 4 ☐ balaa wallooluu kan hin ta'iin.5 . ☐ dhibee sombaa S.hargansuu) 6 ☐ Tajaajila haadholee ulfaa. 7. ☐ dahumsaaf 8. ☐ rakkoo dhiibbaa dhiigaaf 9.☐ dhibee sukkaaraaf 10 ☐. talaalii ijoollee fi ulfaaf 11. Karoora maatiif. 12.☐Kan biraa _____	
320	Dhaabilee fayyaa ji'a 12 dar;barban keessatti isin mudteef deemtan?	1.☐.hospitaala 2 . ☐Buufata fayyaa 3 ☐ kilinika 4 ☐ .kilinika dhuunfaa 5 ☐ yaalii aadaa 6 ☐mana qorichaa 7. ☐ eessa iyyuu hin deemne 8 .garbiraa_____	
321	Maaliif bakka deemtan filattan	☐...haala gaariin nu keessummeessu 2.☐ dhihoodha 3 ☐rakasa 4.. ☐..meeshaa gahaa qabu 4. kan biraa	
322	Dhibee fayyaa ji'a 12 darban keessatti isin mudateef yeroo meeqa dhabbilee fayyaa deemtan?	1.Yeroo tokko 2.yeroo lama 3.yeroo sadii 4.yeroo afurii fi isaa ol	
323	Dhaabilee fayyaa deemuu keessan ibsuuf garaagarummaa yeroo inni xiqqaan isa ammaa/dhihoo fi isa darbee gidduu jiru isa kami?	**1.<ji'a1 2**.ji'a 2-3 3.ji'a3-5 4.ji'a 6 fi isaa ol	
324	Tajaajila fayya kamtu akka keessanitti dursi kennamuu qaba. 1-5 kaa'aa, 1-baay'ee barbaachisaa jechuu dha.	1.____Tajaajila fayyaa Haadholee fi Da'imanii 2.____Aadaaa Wallolu hambisuu 3.____ yaalii aadaa ykn amantii cimsuu 4.___ odeeefannoo fi olerguu/rifarii kennuu. 5.___ Tajaajila fayyaaa ekisteenshinii Fayyaatiin 6.kanbiraa_____	
325	Kaneen keessaa kamiif mana yaalaa deemuun tajaajilamuun barbaachisa? 1=eeyyee, 0=lakki	1.☐ Busaa 2. ☐ Garaa kaasaa 3. ☐Hordoffii ulfaa fi dhibee ulfaa 4. ☐ Dahuumsaaf 5. ☐Balaa miidhadhaaf 6. ☐ rakkoo dhiibbaa dhiigaaf 7☐ dhibee sukkaaraa 8. ☐ Talaallii ijoollee fi ulfaa 9. ☐ Talaallii ijoollee fi ulfaaf 10. ☐Karoora maatiif 11. Kan biraa	
326	Tajaajila fayyaa walii gala ibsaman ji'a 12 darban dura keessaatti argattan itti quufuu ykn itti quufuu dhabuun keessan walii galtu? 1=baay'ee itti walii hingalu, 2=walii hin galu, 3= gidduu galeessa, 4=walii gala, 5=baay'ee itti walii gala	1.☐..oggeessonni kabaja fi dhimamuun nu yaalan. 2. ☐ Mooraan dhabata fayyaa keessi qulquluudha.3 ☐ .Qoricha ajajame hunda achumaa argadhe. 4. ☐ Miidhaaf faayidaa qoricha ajajamee nahubachiisaniiru 5.☐Dhaabaticha keessatti bakka barbaadan argachuuf salphaa dha.6☐tajaajila hunda argachuuf yeroo gabaabaa fudhate.	

327	Qulqullina tajaajila yaalii dhaabbata fayya irraa argattan akkamitti madaaltu	1.Qulqulina hinqabu 2. Qulqulina gaarii qaba.3 baayisee qulqu luudha	
328	Waggaa lamaan darban wajjin wal-bira yeroo qabamu tajaajila yaalii gaarii argacuuf,salphaa dha,ulfaata,ykn garagarummaa hin qabu	1.Salphaadha. 2.ulfaataadha. 3. Garaagaru mmaa hinqabu□□4. Hin beeku□	
329	Maatii keessan keessa ji'a 12 darban keessatti kan boqote/du'e jira?	1.=Eeyyee dhi__umurii___dub___umurii___,0=lakki	
330	Yoo gaaffii *324* eeyyee ta'e, sababni du'aa maali (deebii tokkoo ol, eeyyee=1, miti=0	Eeyyee=1,Miti= 0 □ 1	
		1.Wal-loluu	
		2. Balaa biraa	
		3.Ofajjeese	
		4. Busaa	
		5.Garaa Kaasaa	
		6.dhukuba sombaa/sirna hargansuu	
		7.sababa ulfaan/da'umsaan	
		8.kanbiraa----	
331	Namichi du'e mana yaalaa deemee ture?	1=eeyyee,0=lakki	
332	Yoo gaaffii "330" lakki ta'e sababa mana yaalaa hin geessiin maali? (1=eeyyee,0=lakki)	1.☐ Dhukkubichi yeroo kan kennu hin turre 2 .☐ tilmaama namich tajaajila fayyaa irraa bu'aa hin argatu jedhuun 3.☐ Qarshi geejibaa dhabuu4. ☐ manni yaalaa fagoo ta'uu 5. ☐dhukkubsataan diduu isaa/ishee 6.☐ balaa tasaa ture 7. ☐ Namniisa gargaaree mana yaalaa geessu hin turre8 ☐ . of ajjeese/ajjeeste 9 ☐ bishanqulqullu/xabala fayyadame 10☐sababa hin qabu 11.garbiraa	
333	Dhukkuba/balaan turban lamaan darbe keessatti isin mudatee ture?	1=eeyyee, 0= lakki	
334	Dhukkubbii torbaan lamaan darbeetti isin mudateef mana yaalaa ammayyaa deemtanii ture?	1=eeyyee, 0= lakki	
335	Yoo deebiin gaaffii "332" lakki ta'e, sababa itti dhukkubbii torbaab lamaan dar beetti isin mudateef mana yaalaa ammayyaa hin deemiin haftan maali?	1.☐ Qarshii dhabuu/baay'ee mi'aayaa dha 2 ☐Amantaa mana yaalaa irraa faayidaa hin argatu jedhuun☐ Qoricha mana qorichaa irraa bitate/tte/dhe 4. ☐Oggeessa yaalii aadaadhaan ilaalameera. 5 ☐. manni yaalaa fagoo ture 6. ☐ Limoo naannoodhaa waraanna dheera 7. ☐ mana ichi yalaa tajaajila qulqulluu hin qabu 8. ☐ sababa hin qabu, 9. Garbiraa_-	
336	Ogeesa yaali adaadhaan ji'a 12 darbe keessatti ilaalamtanii beektu?	1. Eeyyee – 0 = Lakk 2. Hin jiru	
4. Tajaajila faayyaan kan wal qabatan			
401	Toftaan **<u>Ijoon</u>** kaffaltii tajaajila yaaliif fayyadamtan maali?	1. insuuraansii fayyaa 2. Qusannoo 3. gurgurtaa galii qonnaa irraa 4. maatii irraa liqeefachuun 5. qabeenya beelada gurguruun 6. gurgurtaa galii qonnaa hin ta'iin (meeshaalee adda addaa)	
402	Gatii tajaajila yaalii akkamitti hubattan?	1. Rakasa, 2. Gidduugaleessa 3. mi'aayaa dha.	
403	Walumaa galatti qarshiin yaaliif ji'a 12 darbe keessaatti baastan meeqa?	Qarshii _____	
404	Bufata fayyaa ykn hospittala isinitti dhihoo miilaan deemuuf yeroo hangam isin fudhata?	1. walakkaa sa'aatii gadi 2. walakkaa sa'aatii hanga sa'a tokkoo 3. sa'aatii tokkoo hanga sa'aatii lamaa 4. sa'aatii lamaa hanga sadii 5. sa'aatii sadii ol	
405	Fageenya dhaabbilee fayyaa irraa kiiloomeetiridhaan meeqa ta'a?	1<10,2=10,3>10	
406	Fageenya dhaabbilee feyyaa isinitti dhiyaatu irraa akkamiti hubattu?	1. dhihoo dha, 2. gidduu galeessa 4. fagoodha	
407	Gatiin geejibaa yeroo dhihoo isa dhumaa tajaajila yaalii argachuuf baastan	1. _____ qarshiin 2. gatii geejibaan hin qabu	
408	Walumaa galatti gatii geejibaa akkamitti hubattu?	1. rakasa, 2.gidduu galeessa. 3. Mi'aayaadha	
409	Yeroo gara dhaabbilee fayyaa dhukkuba dhihoo yeroo dhumaaf dhuftan gatii nyaataa fi tajaajila adda addaa eeqa baastani?	Qarshii _____	

	5. Inshuuraansii fayyaa hawaasaa /IFH		
501	Waa'ee inshuuraansii fayyaa hawaasummaa beektu?	1= Eeyyee , 0 = Lakki	
502	Yoo *501* eeyyee ta'e, isa kamtu IFH ibsa?	1. yaalii fayyaaf dursani kaffaluu 2. gibira mootummaaf kaffaluu 3. Mootummaan tola yaalii kennuu 4. kan biraa	
503	Akkamitti hubannaa argattan?	1. olla irraa 2. radiyo /TV 3.barumsa/leenjii gandatti kenname 4. marii raayyaa. 5.gaazexaa/ barreefamaan 6. karaa biraa _____	
504	IFH isiniin akkasumas maatii keessan fayyada jettanii yaaddu?	1= Eeyyee 0= Lakki 2. hin beeku	
505	Kana dura waldaa qusannoo xixiqqaa mana yaalaaf oolu qabdu	1=eeyyee , 0=Lakki	
506	Yeroo ammaa isin miseensa IFHti?	1=eeyyee ,0=Lakki	
507	Kaffaltiin IFH maatii keessanii al tokkotti meeqa?	Qarshii _____	
508	Kaffaltii IFH kana maaliif fayyadamuun danda'ama?	1☐ baasii☐lii mana yaalaatti kennamuuf qoricha ogeessi ☐ju dabalatee 2. maatii hunda mis☐nsa ta'ee galmaa'eef 3. geejiba yeroo rifarii jedhamanii 4. baasii nyaataa yeroo mana yaalaa deemanii 5. kan biraa ___	
509	Yoo" 506" eeyyee ta'e sababni isin miseensa insuuraansii fayyaa hawaasummaa (IFH) taatani maali?	☐. of eeggannoo qarshii yaalii yoon dhukkubsadhe ykn miidhamee dha. 2. ☐ yeroo dhukkubsatan kaffaluu irra wayya. 3 ☐Ollaan koo natti hime jennaani. 4. ☐ Maatiin koo na gaafannaani 5. ☐Hoogganaan uummataa natti himnaani 6.kan biraa___	
510	Yoo miseensa IFH taatan qulqulina itti fayadama IFH akkamitti madaltu?	1. Baay'ee gaariidha. 2.Gahaa dha. 3 qulqullina hin qabu	
511	Koree hooggansa IFH amanamoodha jettu?	1=eeyyee 0= Lakki 2. hin beeku	
512	Miseensummaa IFH keessan haaromsitaniitu?	1. eeyyee. 2. Lakki	
513	Kanaan dura miseensa turtan amma garuu jhin haaromsine yoo ta'e sababniisaa maali?	1☐ kaffaltiin haaromsuu isaa natti ulfaate. 2☐. Tajaajila kennamutti hin quufne. 3. ☐ Dhaabbileen fayyaa fagoo dha. 4 ☐. Kaffaltii geejibaa hin qabu 5.☐ yeroon kaffalti isaan mijataa miti 6. ☐ maatii keenya keessa bara darbe namni dhukkubsate hin turre 7. Garbiraa _____	
514	Yoo gaaffii "512" lakki ta'e,Yeroo dhufutti kaffaltii IFH ni haaromsitu?	1= Eeyyee , 0 = Lakki	
515	Amma yoonaatti miseensa IFH miti yoo ta'e sababa maaliini?	1. ☐.....hubannaa isaa hin qabu 2. ☐kaffalticha insuuraansii kaffaluu hin danda'u 3. ☐ yeroo baay'ee fayyaa waanan tureef nah in barbaachisu. 4. ☐Dhaa bbileen fayyaa dhihoon hin jiran 5. ☐toftaa IFH kanatti hin amanu 6. ☐ Bakka I galmee fagoo waan ta'eefi 7.☐ warri na qacaran basii mana yaalaa naa f danda'u 8. Garbiraa ____	
516	Yoo hubannaa isaa hin qabdan ta'e akkamitti baruu barbaaddu?	1☐ olla irraa . 2.☐ radiyo /TV .3.☐ barumsa/Leenjii gandatti kennamu . 4. ☐ marii raayyaa . 5. ☐ barrefamaan . 6. karaa biraa _____	
517	Yoo amma misensa miti ta'e, isa itti aanutti missens a taatu?	1=eeyyee 0=Lakki	
518	Yoo"517" eeyyee ta'e, yeroon kaffaltii siiniiff mijatu kami?	1.Torban torbanitti, 2. ji'a ji'aani 3. ji'a jaha jahaan 4. waggaa waggaadhaan	
519	Gatii kaffaltii IFH waggaa waggan kaffalamu kana akkamitti hubattu?	1.Rakisa, 2. gidduu galeessa 3. Mi'ayaadha.	

Yaada dabalataa yoo qabaattan_____

Galatoomaa! Gaafataan: yeroo itti gaaffiin dhume barreessi_____

Qajeelcha gaaffii gad-fageenyaa

Ajaja warra daataa sassaabaniif;

Dursa fedha qabachuu nama gaafatamuu mirkaneeffachuu. Kutaan gaaffilee hundi jiraachuu is erga mirkaneefattee booda gaaffii osoo hin jalqabiin fedha gaafatamaa afaaniin ykn dubbisuun adda baafachuu. Deebii hunda sirriitti barreessuu hin dagatiin.

Unka walii galtee

Maqaan koo _____. Ani hara'a asitti argamuun koo qo'annoo Kollejjii Fayyaa Hawaasaa fi Medikaal Saayinsii ,Yuunivarsiitii Jimmaatiin gaggefamuuf dataa sassaabuufi. Nuti gaaffii muraasa itti fayyadama tajaajila fayyaa fi haalota walitti dhufan irratti isin gaafanna. Yoo fedha keessan ta'e, deebii keessan galmeessinee qabanna.Yoo osoo deebii kennitanii gaaffiin isinitti hin tolle jiraate dhiisuu dandeessu. Maalummaa keessan kan ibsu gafannoo kana wajjin hin ibsamu ykn hin qabamu. Ibsituun nuti fayyadamnu kun deebii addan baafachuu qofa, erga daataan walitti qabamee booda faayida ala ta'a.

Hirmaannaan keessan qo'annoo kana irratti fedha keessaniin qofa ta'a. Gaaffiin kun isiniin qofatti gaafama. Daqiiqaa 30-40 fudhata. Yoo giddutti fedha dhabdan dhaabuu dandeessu garuu deebiin keessan baay'ee barbaachisaa dha. Yoo fedha keessan ta'e gaaffii fi deebii itti fufuu dandeenya.

Hirmaachuuf fedha qabdu? Eeyyee yoo ta'e itti fufi. Lakki yoo ta'e galateefadhuu asumatti dhaabi.

Yoo yaada dabalataa wa'ee qo'annichaa barbaadan bilbila kanaan nu haa dubbisan.

Zarihuun Ayyanawu-0912119530-Abbaa qo'annoo.

_____(mallattoo gaafataa akka gaafatamaan afaaniin walii gale kan ibsu)

B- Qajeelcha gaaffii gad-fageenyaa hooggantoota dhaabbilee fayyaaf oolu

1. Rakkoon fayyaa uummataa naannoo kanatti beekaman maal fa'i(5-top disease of the catchment area).Tartiibaan dhibee shanan aanaa kanaa ciminaan beekaman natti himaa.
2. Uummanni kun tajaajila fayyaa itti fayyadamuuf isaan kamiif dursa kenna? (yalii aadaa,mana qorichaa,kilinika dhuunfaa ykn kan mootummaa.)
3. Uummani yeroo baay'ee dhibee/dhukkuba akkam akkamiif mana yaalaa deema?
4. Hubannoon uummataa tajaajila yaalii irratti qabu aakami? IFH irraatti hoo
5. Rakkoon itti fayyadama tajaajila fayyaa naannoo kanatti jiran maal fa'i? ?(Haallii uummanni itti fayyadamu warra inshuuraansii qabanii fi hin qabne jidduu, haala argamiinsa tajaajila fayyaa, haalli tajaajilli fayyaa uummataaf kennamu,haala kaffaltii)
6. Rakkoo ibsaman kana akkamitti akkataa cimina isaaniitiin tartiibaan kaa'uun danda'ama?
7. Madda rakkoolee kanaa ta'uu kan danda'an maal fa'i?
8. Namni hundi uummani naannoo kanaa tajajila fayyaa fayyadamaa jiraa? Yoo miti ta'e sababni isaa maali?
9. Rakkoolee itti fayyadama tajaajila fayyaa irraatti haallii dabaluu ykn hir'achuu itti fayyadamtootaa wajjin wal qabate maali miseensotaa fi miseensota inshuuraansii hin ta'iin?
10. Hawaasni harki caalu kaffaltii tajaajila fayyaa toftaa kam fayyadamaa jira? (kaffaltii yeroo yalii argatu, yaalii tolaa, IFH)
11. Aadaan itti fayyadama tajaajila fayyaa yeroo miseensa insuuraansii fayyaa hawaasummaa ta'u maal fakkata? Yaada-bakka(manatti dhihoo dha), gatii(rakasa), yaalii tolaa, faasilitii gaarii (siree), jiraachuu qorichaa, amantaa (ogeessota irratti) kkf.
12. Itti fayyadama tajaajila fayyaa irratti kan miseensaa fi mit-miseensa IFH ta'an haala wal fakkaatu akkamitti ibsama?
13. Itti fayyadama tajaajila fayyaa irratti kan miseensaa fi mit-miseensa IFH ta'an haala kamiin adda akka ta'an akkamitti ibsama?
14. Haalli namoota mit- miseensa fi miseensa insuuraansii fayyaa hawwaasummaa tajaajila fayyaa argachuu irrati akkamitti wal cinaa qabuun ilaaluun danda'ama?(hubannaa, fedhii miseensa ta'uu ykn miseensummaa itti fufuu)
15. Haala kenninsa tajaajila fayyaa irratti dhaabbileen fayyaa haala addaa mit-miseensaa fi miseensa IFH godhan jiraa? Namni addaa miseensota keessummeesu jiraa? Akkamitti miseensota adda baastu ?Ibsaa.
16. Iitti fayyadama tajaajila fayyaa irratti miseensa IFH ta'uun faayidaa fi miidhaan inni qabu maali?
17. Tajaajili yaalaa inshuuraansiidhaan hin hammatamiin jiru? Yeroo booda kan jijjiramni godhamu hoo?
18. Haalli fedhiin harka qal'eeyyii sagantaa IFH kana keessatti akkamitti hubatame?

19. Itti fayyadama fandii IFH irraa argamu wajjiin rakkoon ijoon jiru maali? Maanajimantiin dhaabbata fayyaa kana keessatti bilisa qaba? FKN onnachiiftuu hojjetaaf kennuun danda'ama?
20. Sagantaa IFH kana sagantaa mootummaa kan biroo wajjin wal simuu isaa akkamitu hubattu?
21. Itti fufiinsa IFH kana akkamitti ibsitu?(gatii,amantaa/trust/,yeroo kaffaltii,dhaabbileen fayyaa deebisanii itti fayyadamuu irratti.)
22. Sirni IFH kun akka itti fufuuf maaltu hojjetamuu qaba?(kaffaltii irratti, itti fayyadama tajaajila fayyaa fi IFH irratti)
23. Akka sgantaan IFH kun bakka biraatti babal'atuuf yaada kennitan qabdu? Fooyya'insi ta'uu qaba jettaan maal fa'i?
24. Yaadni dhumaa dabaltan yoo jiraate?

C- Qajeelcha gaaffii gad-fageenyaa hooggantoota Koree IFHf oolu

1. Rakkoon fayyaa uummataa naannoo kanatti beekaman maal fa'i?Tartiibaan dhibee/ dhukkuboota shanan aanaa kanaa ciminaan beekaman natti himaa.
2. Uummanni kun tajaajila fayyaa itti fayyadamuuf isaan kamiif dursa kenna? (yalii aadaa,mana qorichaa,kilinika dhuunfaa ykn kan mootummaa.)
3. Uummani yeroo baay'ee dhibee/dhukkuba akkam akkamiif mana yaalaa deema?
4. Hubannoon uummataa tajaajila yaalii irratti qabu aakami? IFH irraatti hoo
5. Rakkoon itti fayyadama tajaajila fayyaa naannoo kanatti jiran maal fa'i ?(Haallii uummanni itti fayyadamu warra inshuuraansii qabanii fi hin qabne jidduu, haala argamiinsa tajaajila fayyaa, haalli tajaajilli fayyaa uummataaf kennamu,haala kaffaltii)
6. Rakkoo ibsaman kana akkamitti akkataa cimina isaaniitiin tartiibaan kaa'uun danda'ama?
7. Madda rakkoolee kanaa ta'uu kan danda'an maal fa'i?
8. Namni hundi uummani naannoo kanaa tajajila fayyaa fayyadamaa jiraa? Yoo miti ta'e sababni isaa maali?
9. Rakkoolee itti fayyadama tajaajila fayyaa irraatti haallii dabaluu ykn hir'achuu itti fayyadamtootaa wajjin wal qabate maali miseensotaa fi miseensota inshuuraansii hin ta'iin?
10. Hawaasni harki caalu kaffaltii tajaajila fayyaa toftaa kam fayyadamaa jira? (kaffaltii yeroo yalii argatu, yaalii tolaa, IFH)
11. Aadaan itti fayyadama tajaajila fayyaa yeroo miseensa insuuraansii fayyaa hawaasummaa ta'u maal fakkata? Yaada-bakka(manatti dhihoo dha), gatii(rakasa), yaalii tolaa, faasilitii gaarii (siree), jiraachuu qorichaa, amantaa (ogeessota irratti) kkf.
12. Itti fayyadama tajaajila fayyaa irratti kan miseensaa fi mit-miseensa IFH ta'an haala wal fakkaatu akkamitti ibsama?
13. Itti fayyadama tajaajila fayyaa irratti kan miseensaa fi mit-miseensa IFH ta'an haala kamiin adda akka ta'an akkamitti ibsama?

14. Ilaachi uummata naannoo kanaa IFH irratti qabu maali? Akkasumas inshuuraansii kana irraa maal eega ? Miseensii fi kan miseensa hin ta'iin?(hubannaa, amantaa IFH fi tajaajila fayyaa, itti fufuu ykn addaan kutuu irratti).
15. Haalli namoota mit- miseensa fi miseensa insuuraansii fayyaa hawwaasummaa tajaajila fayyaa argachuu irrati akkamitti wal cinaa qabuun ilaaluun danda'ama?(hubannaa, fedhii miseensa ta'uu ykn miseensummaa itti fufuu)

16. Haala kenninsa tajaajila fayyaa irratti dhaabbileen fayyaa haala addaa mit-miseensaa fi miseensa IFH godhan jiraa? Namni addaa miseensota keessummeesu jiraa? Akkamitti miseensota adda baastu ?Ibsaa
17. Iitti fayyadama tajaajila fayyaa irratti miseensa IFH ta'uun faayidaa fi miidhaan inni qabu maali?
18. Tajaajili yaalaa inshuuraansiidhaan hin hammatamiin jiru? Yeroo booda kan jijjiramni godhamu hoo?
19. Rakkoon ijoon funaansa kaffaltii IFH waliin jiran maal fa'i?
20. Itti fayyadama fandii IFH irraa argamu wajjiin rakkoon ijoon jiru maali? Maanajimantiin dhaabbata fayyaa bilisa qaba? FKN onnachiiftuu hojjetaaf kennuun danda'ama?
21. Sagantaa IFH kana sagantaa mootummaa kan biroo wajjin wal simuu isaa akkamitu hubattu?
22. Toftaan ittiin dhaabbileen fayyaa ergama isaanii miseensota IFHf raawwachuu fidhiisuu isanii hordofamu akkamitti?Gabaasni/yaadonni akkamitti hordofamu? Komiin miseensotaa akkamitti keessummeefama?
23. Itti fufiinsa IFH kana akkamitti ibsitu?(gatii,amantaa/trust/,yeroo kaffaltii,dhaabbileen fayyaa deebisanii itti fayyadamuu irratti.)
24. Sirni IFH kun akka itti fufuuf maaltu hojjetamuu qaba?(kaffaltii irratti, itti fayyadama tajaajila fayyaa fi IFH irratti)
25. Akka sgantaan IFH kun bakka biraatti babal'atuuf yaada kennitan qabdu? Fooyya'insi ta'uu qaba jettaan maal fa'i?
26. Yaadni dhumaa dabaltan yoo jiraate?

D- Qajeelcha gaaffii gad-fageenyaa hooggantoota raayyaa fayyaa gareef oolu

1. Rakkoon fayyaa uummataa naannoo kanatti beekaman maal fa'i?Tartiibaan dhibee/ dhukkuboota shanan aanaa kanaa ciminaan beekaman natti himaa.
2. Uummanni kun tajaajila fayyaa itti fayyadamuuf isaan kamiif dursa kenna? (yalii aadaa,mana qorichaa,kilinika dhuunfaa ykn kan mootummaa.)
3. Uummani yeroo baay'ee dhibee/dhukkuba akkam akkamiif mana yaalaa deema?
4. Hubannoon uummataa tajaajila yaalii irratti qabu aakami? IFH irraatti hoo?
5. Rakkoon itti fayyadama tajaajila fayyaa naannoo kanatti jiran maal fa'i ?(Haallii uummanni itti fayyadamu warra inshuuraansii qabanii fi hin qabne jidduu, haala argamiinsa tajaajila fayyaa, haalli tajaajilli fayyaa uummataaf kennamu,haala kaffaltii)
6. Rakkoo ibsaman kana akkamitti akkataa cimina isaaniitiin tartiibaan kaa'uun danda'ama?
7. Madda rakkoolee kanaa ta'uu kan danda'an maal fa'i?

8. Namni hundi uummani naannoo kanaa tajajila fayyaa fayyadamaa jiraa? Yoo miti ta'e sababni isaa maali?
9. Rakkoolee itti fayyadama tajaajila fayyaa irraatti haallii dabaluu ykn hir'achuu itti fayyadamtootaa wajjin wal qabate maali? miseensotaa fi miseensota inshuuraansii hin ta'iin?
10. Hawaasni harki caalu kaffaltii tajaajila fayyaa toftaa kam fayyadamaa jira? (kaffaltii yeroo yalii argatu, yaalii tolaa, IFH)
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14. Ilaachi uummata naannoo kanaa IFH irratti qabu maali? Akkasumas inshuuraansii kana irraa maal eega ? Miseensii fi kan miseensa hin ta'iin?(hubannaa, amantaa IFH fi tajaajila fayyaa, itti fufuu ykn addaan kutuu irratti).
15. Haalli namoota mit- miseensa fi miseensa insuuraansii fayyaa hawwaasummaa tajaajila fayyaa argachuu irrati akkamitti wal cinaa qabuun ilaaluun danda'ama?(hubannaa, fedhii miseensa ta'uu ykn miseensummaa itti fufuu)
16. Haala kenninsa tajaajila fayyaa irratti dhaabbileen fayyaa haala addaa mit-miseensaa fi miseensa IFH godhan jiraa? Namni addaa miseensota keessummeesu jiraa? Akkamitti miseensota adda baasu ?Ibsaa
17. Iitti fayyadama tajaajila fayyaa irratti miseensa IFH ta'uun faayidaa fi miidhaan inni qabu maali?
18. Tajaajilli yaalaa inshuuraansiidhaan hin hammatamiin jiru? Yeroo booda kan jijjiramni godhamuuf hoo?
19. Rakkoon ijoon funaansa kaffaltii IFH waliin jiran maal fa'i?
20. Toftaan ittiin tajaajilli dhaabbileen fayyaa ergama isaanii miseensota IFHf raawwachuu fi dhiisuu isanii hordofamu akkamitti? Komiin miseensotaa akkamitti keessummeefama?
21. Itti fufiinsa IFH kana akkamitti ibsitu?(gatii isaa, amantaa/trust/ koree fi dhaabilee fayyaa irratti, yeroo kaffaltii.)
22. Sirni IFH kun akka itti fufuuf maaltu hojjetamuu qaba?(kaffaltii irratti, itti fayyadama tajaajila fayyaa fi IFH irratti)
23. Akka sgantaan IFH kun bakka biraatti babal'atuuf yaada kennitan qabdu? Fooyya'insi ta'uu qaba jettaan maal fa'i?
24. Yaadni dhumaa dabaltan yoo jiraate?