



**ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCIENCE
SCHOOL OF PUBLIC HEALTH**

**CLIENTS' SATISFACTION WITH A COMMUNITY BASED HEALTH
INSURANCE SCHEME AND ASSOCIATED FACTORS IN ADDIS ABABA**

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Abbreviations

1. AARHB----- Addis Ababa Regional Health Bureau
2. CBHI----- community based health insurance
3. EHSTP----- Ethiopian Health Sector Transformation Plan 2
4. FMOH----- Federal Ministry of Health
5. UHC-----universal health coverage

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Abstract

Many countries introduced CBHI as their health care financing system to ensure healthcare access. Understanding the level of satisfaction and factors associated with the level of satisfaction in Addis Ababa is essential to ensure the sustainability of the program. Therefore, this study assessed the level of satisfaction of CBHI members and its associated factors.

Methodology: Institutional based cross-sectional study was conducted on a sample of 419 beneficiaries in the ten health centers found in the ten sub cities of Addis Ababa, which have deal with their respective scheme to give service to members. Both quantitative and qualitative methods were used. Data was collected using pretested structured questionnaire and FGD guide. Descriptive and binary logistic regression analysis was carried out to identify its associated factors. Odds ratio with 95% confidence interval was calculated using logistic regression analysis. Finally, variables with p-value of <0.05 has been considered as statistically significant. Data from the qualitative part was analyzed by using thematic analysis

Result: In this study, the overall satisfaction level of households with the community-based health insurance was found to be 46.3%. Satisfaction of CBHI members was positively associated with CBHI management regulations (AOR= 1.96, 95% CI: 1.12, 3.46). In addition participants who received the right drug (AOR=1.77, 95% CI: 1.08, 2.93), households who got immediate care during the recent visit (AOR = 4.95, 95% CI: 2.72, 8.98), those who agreed with the adequacy of medical equipment at the permitted public health institutions (AOR = 1.65, 95% CI: 1.02, 2.69), and households who agreed on the adequacy and qualification of health personnel (AOR= 1.89, 95% CI: 1.12, 3.20) were more satisfied with the scheme than their counter parts. The challenges mentioned by the discussants were shortage of drugs, disrespect and poor attitude of health professionals, absence of kenema pharmacy in their nearby place, lack of laboratory and other diagnostic service, health professionals lacked awareness about CBHI scheme, and rigid premium payment modality.

Conclusion and Recommendation: In this study, the satisfaction level of members of CBHI scheme was found to be low. In order to achieve a better result and ensure the sustainability of CBHI program the health bureau together with sub cities should do further investigations on the qualification and competency of health professionals, availability of medication and medical equipment and attitude of pharmacists at Kenema pharmacies towards CBHI members.

1. Introduction

Financial ability to pay for health service is the main issue when it comes to using health institutions(1). Lack of secure financing system is the main reason millions of people die from treatable medical conditions.(2, 3)out of pocket, expenditure is one of the main causes for poverty due to a certain illness.(4)

In over 60% of countries with incomes below \$1000 per capita, out of pocket payment constitutes more than 40% of health expenditure. Ethiopia allocated around 8.04% of total government expenditure in 2016/17 G.C, which is lower than average of 8.7% for low income countries (WHO, Global Health Expenditure Data Base,2016). An absence of a system that provides financial protection can lead to extreme poverty. Out of pocket, payment covers about 31% of health care expenditure in Ethiopia. In addition, the government's spending on health accounts for 32% of the total health spending:- whereas NGOs contribute 35% of the total health spending.(5)

Countries have different systems to finance their health system. This includes tax-based system, social insurance systems or mixed systems. Community-based health insurance (CBHI) is a new way of supporting the health care financing. CBHI applies all the principles of insurance system except that it is not meant for profit. (6)

Many countries are making CBHI as their health care financing system in order to have additional financing source, increasing health seeking behaviour of citizens by removing the fear of not having enough money to spend on health care. (4)

CBHI refers to a health insurance system where people become members voluntarily and is not for profit. (4)It applies principles of an insurance system like risk pooling, risk sharing and financial protection. This in turn will ensure that access to health care, protection from financial insecurity and responsiveness of the health system is maintained. (4) The main goal of the health sector is to make sure that everyone who needs health care is able to have one without undue hardship. (4)hence universal health care needs to be Ethiopia's goal within the coming years. (4)Universal health care is about making sure that everyone gets health care given that financial

insecurity has been dealt with. (4)The core values and principles of the second Ethiopian health sector transformation plan (EHSTP 2) all reflect the importance of making health care available for all. .CBHI was included in the HSTP 2 as a means of insuring universal health coverage (UHC) through provision of financial risk protection. (7)

Ethiopia is mostly affected by communicable diseases, which can be easily treated if given the right treatment at health facilities. This service is given or covered by the out-of-pocket spending from clients and the rest is from foreign aid. This characteristic of the health system makes it hard for people to utilize the services provided. (1)

Community based health insurance (CBHI) was introduced in Ethiopia in 2010G.C. It was then started in Addis Ababa in 2016 G.C. The implementation on regions was taken as a benchmark to start the implementation in Addis Ababa. It has been almost two years since the scheme made members and started giving service. 40 woredas have started the implementation, from these ten woredas started on 2016 G.C. The rest 30 woredas were latter added in 2017 G.C in Addis Ababa and has a total of about 5,006,000population.(8) From this 305,603 people earn their living by working in the informal sector. (Aggregated from CBHI data of Addis Ababa Regional Health Bureau).

1.1. Statement of the problem

Health care financing is a major problem in many low- and middle-income countries where the disease burden is high, and people must spend from their pocket to be treated. People in different parts of the world may not use modern health service for many reasons; one of these reasons is the inability to afford the service available. This is even a serious a problem in poor countries was the condition of living itself exposes to ill health. The lack of access to health service, poverty and expenditure are strongly associated with out-of-pocket spending to get a health service.(4, 9)

Many African countries rely on out-of-pocket payment (30% - 85% of total health spending) to cover health expenses of their citizens. This pushes people living in this continent to poverty. Due to lack of financial capability to afford a health care people with low income have poor access to health service. These people contribute to 80% of the global death from communicable diseases and 68% of death from injuries. The health care financing in Ethiopia is mainly characterised by low government expenditure (6.2% of total public budget and 1.8% of GDP in 2000) and out of pocket (OOP) from citizens.(5)

Ethiopia's health care financing depends on the government expenditure (31%), out of pocket expenditure from users (user fee 31%) and donor's contribution (37%). FMOH mentioned that the out of pocket spending has increased from 31% in 2000 to 37% in 2010. (5)To tackle the problem brought about by high out of pocket spending, the Ethiopian government introduced CBHI in 2011G.C nationally and in 2016 G.C in Addis Ababa.

Low enrolments are a big challenge in low- and middle-income countries. This is a threat not only in keeping the scheme sustainable but also in future enrolment of members and dropouts. In addition, low adhesion rate, limited resource mobilization and poor scheme sustainability are the major challenges in sub- Saharan countries.(10)

Low attitude towards CBHI, lack of awareness about CBHI, inability of health institutions to provide promised health services in the benefit package, absence of proper referral system, lack

of clients to comply to prescribed treatments and professional moral hazard are some of the challenges faced when implementing CBHI in Ethiopia.(3)

A study done on satisfaction with CBHI in Sheko district in southwest Ethiopia the satisfaction level of the beneficiaries was found to be 54.7%. In another study done in in Damotwoyde district in SNNPR Ethiopia, reported that the satisfaction with CBHI to be 91.38 %. (2, 11) Another study done in Anilemo District of Hadiya zone, Southern Ethiopia found 54.1% of CBHI members were satisfied.

Different studies have reported different factors associated with the satisfaction level of members of CBHI. These included factors like age of members, their family size, laboratory service and health service provider friendliness. In addition to this CBHI opening hours, affordability of premium, card collection process, waiting time after paying for membership, type of health facility visited, length of enrolment in the scheme are some of the major factors that influence satisfaction of members.(2, 11) In addition to this, inconvenient paying model and renewal period were reported as important factors affecting member's compliance to CBHI requirements. (2, 11) However, the findings of these studies were inconsistent in different rural settings and not well explored in urban settings. Thus, the proposed study will examine the level of satisfaction and its associated factors in urban area using Addis Ababa as a case study. This study will also emphasize on the major implementation challenges of the scheme on the level of satisfaction. Thus, the current study will take in to account such important factors into consideration.

1.2. Significance of the study

This study will try to assess the level of satisfaction of CBHI members found in Addis Ababa and factors that contribute to their satisfaction. This will fill in the information gap and point direction of action that should be taken to help sustain the scheme. In addition to this, this research will also address the information gap on the effectiveness of scheme design and major challenges of the scheme. This will help in reviewing the system in order to increase its performance. On the other hand, the findings of this research will add the current knowledge and be used as an input for the still ongoing implementation of CBHI.

2. LIRATURE REVIEW

Definition

Community based health insurance (CBHI) is voluntary, non-profit health insurance. It helps to mobilize additional resource to the health sector. It will reduce the lack of medical service due to unaffordability. CBHI applies principles of insurance, which include principles of resource pooling, paying premium, sharing risks between members, deal with partners in the health system to improve access to care, financial protection and responsiveness of the health service. (3)

PRINCIPLES

CBHI uses principles of insurance, members pay fees to the insurance scheme and in return their health service cost is covered by the scheme. Unlike other microfinances, in CBHI members pay premium to the insurance scheme which can only occur when there is trust and solidarity within the community. This is why social capital, which is the existence of trust and solidarity in the community is the basis for successful implementation of CBHI.(12)

CBHI to achieve universal health care

Achieving UHC (universal health coverage) is part of the SDGs (sustainable development goals) which is to be achieved by all members of United Nations. UHC is about being able to get health service despite of having the financial capability when in need of health service. (13) One way of making health service available and accessible for all is dealing with unaffordability by using health insurance mechanism. This way risks can be shared among individuals and financial inputs pooled between individuals who need health service but are not able because they cannot afford it and those who are well but pay premium.(3)

CBHI in Sub-Saharan Africa and LMICs

Citizens of Sub-Saharan Africa are not able to get health service due to their poverty and due to the fact that universal health coverage is not available. Hence, in order to reduce this financial burden on the poor countries in sub-Saharan Africa are making CBHI their way to UHC.

Unlike low-income countries, middle and high income have designed different means to secure their citizens financial ability to afford a health service. (14) In low and middle-income countries, out of pocket spending for health service is the main cause for economic deterioration of households. (10) Community based health insurance is now a new means to make health service accessible and affordable in low and middle-income countries. (15) Community based health insurance decreases out of pocket spending and increases cost recovery. (16) Community based health insurance schemes in different parts of the world share common principle of risk sharing among members and provision of financial risk protection. (16) Voluntary membership, payment schedules which are inflexible, limited benefit packages, are some of the common features of CBHI in different countries.(16)

CBHI in Ethiopia

The government of Ethiopia is trying to solve the financial catastrophe that is brought on people by out of pocket payment by starting an alternative means to support the health care finance. (2) Ethiopia's health care financing depends on the government expenditure (31%), out of pocket expenditure from users (user fee 31%) and donor's contribution (37%). FMOH mentioned that the out of pocket spending has increased from 31% in 2000 to 37% in 2010. (5) To tackle the problem brought about by high out of pocket spending, the Ethiopian government introduced CBHI in 2011 G.C nationally and in 2016 G.C in Addis Ababa.

Accordingly the government introduced SHI and CBHI in 2010/2011 G.C. (3) SHI (social health insurance) is for part of the population who are working employed and getting paid on a monthly basis, while CBHI is for part of the population who are involved in the informal economic sectors. These involve trade, owning one's own business, farmers, and the likes, who are not paid on a payroll-based system. It was first implemented in four major regions: - Amhara

region, Oromia region, SNNP and Tigray. 13 districts were involved in the first implementation. (3) Recently about 20 million people Part of the population found in Ethiopia who are eligible for CBHI are members of the scheme. The main features of the Ethiopian community-based health insurance include voluntary membership on a household level, financing the poor, general and targeted subsidy, benefit package and community involvement in the management of the scheme. The CBHI scheme is established at the woreda level in regional states and at sub city level in Addis Ababa. The scheme is comprised of three teams recently leader, data management team, medical auditing team and finance team. In Addis Ababa, this team is also available at the woreda level. The schemes bank account is under the authorization of the sub city and is in control of the schemes team leader and the sub city health office head. The scheme will sign an agreement with the health institutions found in its jurisdiction (both health centres and hospitals) to provide the service to its members for a maximum of two years before the deal is off. The scheme provides payment to the health institutions each quarter when they send the cost, they have incurred by providing service to members. The scheme conducts both financial and medical audit before providing payment to the respective institution. Members are classified as payers and indigent. Payers are members who can afford to pay the premium, while indigents are those who cannot afford to do so. These members are identified by the woreda administration based on certain criteria. The premium is paid once a year and within the fixed schedule by the scheme. The members are asked to provide the payment on a household basis and not on an individual basis. A member will pay the premium every year to stay in the scheme despite utilization of service provided by health centre or hospital in agreement with the scheme. The benefit package for members includes outpatient services, in-patient services, surgical services. CBHI members are obliged to visit health centres before they can go to hospitals. A member who visits hospitals without first going to a health centre in deal with the scheme will have to pay half of the cost of the service obtained. (From the Addis Ababa City Administration CBHI directive)

The implementation of CBHI in Addis Ababa was started in 2016/2017 G.C. It was first started in ten woredas found in ten sub cities, one pilot woreda in each sub city, then later got up scaled to additional 30 woredas. Recently woredas, which have not implemented have begun the implementation process. (From a report of AARHB CBHI directorate)

Community based health insurance members expect to get better quality of service. Their satisfaction is important in order to stay enrolled in the scheme.(2)A study conducted in Sheko district of south west Ethiopia found that 54.7 % of the members who participated in the study were satisfied with the scheme. This is in line with a study done at Anilemo district of Hadiya zone which found the satisfaction of CBHI members to be 54.1 %. This study used trustworthiness of CBHI management, opening hours of CBHI, and card collection processes of CBHI, waiting time until service is provided, schedule to pay premium, satisfaction with the information provided, satisfied with the packages of service provided, wanting to stay enrolled and recommending of upscale to measure the satisfaction of CBHI members to measure member's satisfaction with CBHI. (2)

In another study done in Damotwoyde, district of Wolyta zone in SNNR the satisfaction of members was found to be 91.38 %. This is high compared to that of Sheko district in the same region. This may be due to the difference in the variables used to measure their satisfaction. (11)

The study done in Damotwoyde district used laboratory service, health service provider friendliness, CBHI office opening hours, card collection process, time to make use of CBHI after payment, schedule to pay premium, trustworthiness of CBHI scheme, wanting to stay enrolled, recommending upscale, satisfied with benefit packages to measure the satisfaction of members. (11)

2.1. Factors associated with satisfaction with CBHI

This study has tried to review some of the factors, which have been mentioned as associated with satisfaction with CBHI. They have different level of significance in different studies. A study done in Sheko district found that age and educational status were strongly associated with satisfaction ($p<0.05$). (2) In the other study conducted in Damotwoyde district age, estimated annual income and family size were strongly associated with satisfaction. Accordingly, as age increased by one-year satisfaction increased while increased family size decreased the satisfaction. (17) A study done in Tehuledere on complying with requirements of CBHI, age was found to be a significant contributor. (18)

In a study done in Damotwoyde households who paid premium three times were less satisfied than those who paid more than three times. (17) The study done in Sheko district indicated that length of enrollment and the type of health institution visited (hospitals or health centers) in the scheme affected the level of satisfaction of members. (2)

According to the study done in Sheko household's knowledge of CBHI was found to have strong association with CBHI members' satisfaction in a study done in Sheko district. (2) Study in Nyanza district of Rwanda found that knowledge was not related to adherence of members to CBHI. (16) In addition to that district which had been agreed with the laboratory service provision and friendliness of health service providers were strongly associated with satisfaction. (2) Another study done in Nyanza district of Rwanda mentioned that health care provider respect and poor quality of care affected the adherence of members to CBHI. (16)

The study done in Damotwoye district found that CBHI office opening hours, time it takes to get service after premium payment and agreement to pay premium were all significantly associated with satisfaction. (11) A study done in Tehuledere district found that premium affordability, attitude towards CBHI management and renewal period were strongly associated with compliance of members to CBHI requirements. (18)

The satisfaction of CBHI members is very important to keep them enrolled in the scheme and insure the sustainability of the scheme. (2) The sustainability of the scheme is a big concern because not only does it decrease the pool, it also threatens the future enrolment and renewal of membership. This in turn leads to financial instability of the scheme which can threaten the ability of the scheme to cover the cost of its members and there for stop its operation. (16) Since membership of CBHI is voluntary it's very important that members are satisfied with the service they get, as they could decide to not be members and also influence others not to be enrolled. (2)

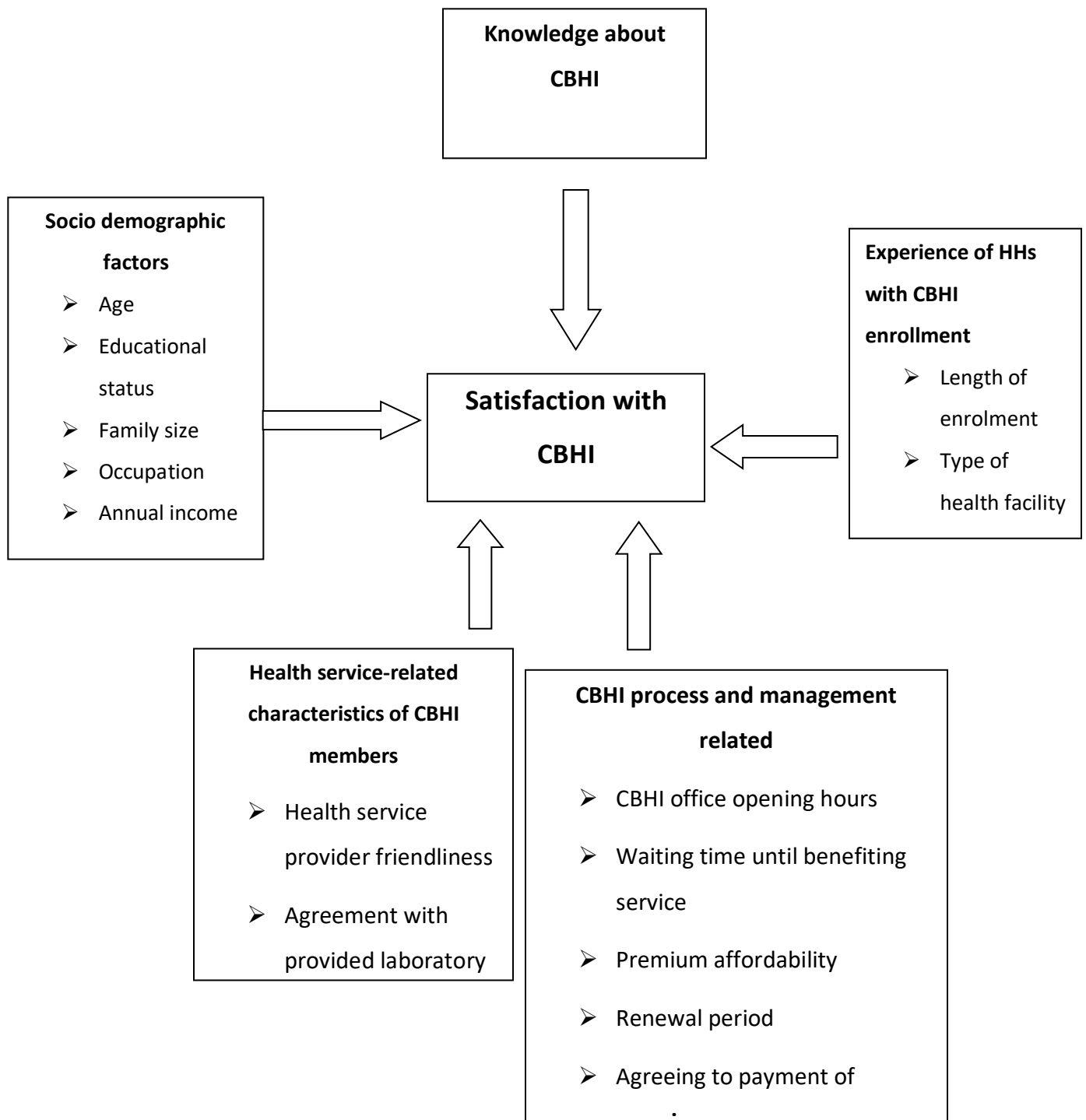


Fig.2 conceptual framework (Revised based on the conceptual framework from study done in Damotwoyde district in SNNPR.)

3. OBJECTIVES

3.1. General objective

- To assess household satisfaction with a community-based insurance scheme and factors associated in Addis Ababa.

3.2. Specific objectives

- To determine the level of satisfaction of households towards the community-based health insurance in Addis Ababa.
- To identify the factors associated with community- based health insurance satisfaction in Addis Ababa.
- To explore the perception of the beneficiaries of the program about the challenges that hinder the performance of the scheme in Addis Ababa.

4. Methodology

4.1. Study area

Addis Ababa is the capital city of Ethiopia located in the Latitude and longitude coordinates of 9.005401, and 38.763611 respectively. This capital city holds 527 square kilo meters of area in Ethiopia. According to the report from Ethiopian statistics agency in 2019G.C. It has an estimated population of over 4,000,000. Females are larger in number than males (1,880,000 male and 2,120,000 females). It is divided into ten sub cities for administrative purposes. The city has a total of 112 public health institutions and 1092 private health institutions of different level. (19). This study was conducted on health centers which are found in woredas which have implemented CBHI in 2017G.C. A total of forty woredas, four in each sub cities, have implemented CBHI, of these only ten woredas have started the implementation in 2017 G.C. Hence ten health centres, one in each sub city, will be included in the study.

4.2. Study design

An institutional based cross-sectional study design was used with both quantitative and qualitative methods to conduct the study on CBHI members in health centers found in woredas which have implemented community-based health insurance in 2017G.C.

4.3. Population

Source population for the study was all community-based health insurance members registered as members in 2017G.C.

4.4. STUDY POPULATION

Study population was selected community-based health insurance members who are found in woredas which have implemented CBHI in 2017G.C and are utilizing the service being provided in the health centers which have deal with the scheme.

4.5. Sample size determination

The sample size was calculated for the specific objective; for the satisfaction level of CBHI members by using single population proportion formula and by considering the following assumptions; proportion (taken from a study conducted in Sheko district on satisfaction level of CBHI members (2), 95% confidence interval (CI), 5% margin of error and adding 10% non-response rate.

Where

$$n = \frac{(Z_{\alpha/2})^2 p (1-P)}{d^2}$$

n = Sample size,

Z $\alpha/2$ = Significance level at $\alpha = 0.05$,

P = taking 54.7 %

d = 0.05 (margin of error).

$$n = \frac{(1.96)^2 (0.547) (1-0.547)}{(0.05)^2}$$

n= 380.8 by adding 10% non-response rate, the final sample size will be 419

4.6. Sample size for associated Factors

The sample size was also be calculated for the second objective using Epi Info stat calculator by taking the following assumptions: power 85%, confidence level 95%, odds ratio 2.29 and percent of outcome in unexposed group 45.7% by taking knowledge of CBHI packages as a factor affecting satisfaction from a study conducted at Sheko district of south west Ethiopia and adding 10% non-response rate the sample size calculated for associated factors is 264. (2) Therefore, based on the two objectives, we select the one that yields the maximum sample size 419.

For the qualitative part six focus group discussion (FGD) was conducted in the selected woredas with a size of 8 to 12 women per each FGD until the information was saturated. The FGD was done with CBHI members using FGD interview guide by trained facilitators.

4.7. Sampling techniques and procedures

A systematic random sampling technique was used to select study participants. In Addis Ababa community-based health insurance implementation was started in 10 pilot woredas found in ten sub cities of the city. The sample of the study was from CBHI members found in those 10 woredas. Respondents of the study was members of CBHI in each of the 10 woredas who are utilizing service provided at health centres in deal with CBHI scheme of their respective woredas. Sample size was allocated to each woreda using proportional allocation. The daily average flow of clients in the facility was calculated from their previous monthly report of CBHI beneficiaries. This was divided by their respective sample size to determine K^{th} -Interval and allowing the samples to be picked every k^{th} client. The first clients were picked by lottery method. Health workers working at OPDs were responsible for tallying the number of CBHI members visiting the facility and was conduct the interview until they achieved the final sample size.

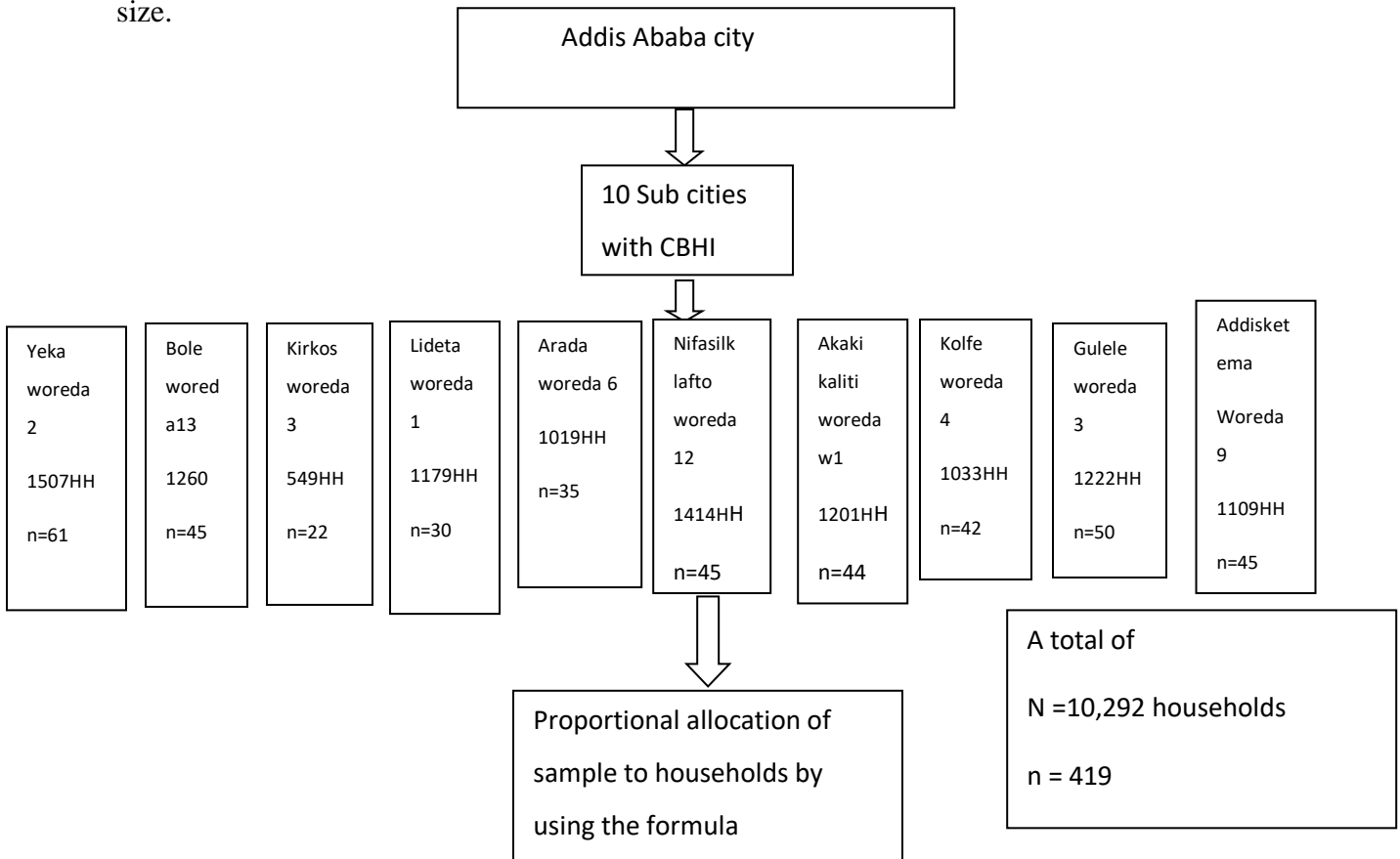


Figure 1 sampling procedure

4.8. Sample allocation to each woreda

Sample was allocated to each woreda by using proportional sample allocation formula ($n_j = n/N \times N_j$)

Selected sub cities	Selected woredas	Sample collected
Yeka	Woreda 2	61
Bole	Woreda 13	45
Kirkos	Woreda 3	22
Lideta	Woreda 1	30
Arada	Woreda 6	30
Nifas silk lafto	Woreda 12	35
Akaki Kality	Woreda 1	44
Gullela	Woreda 3	50
Kolfe	Woreda 4	42
Addis Ketema	Woreda 9	45
Total sample		404

4.9. Study Variables

4.9.1. Dependent variable

- The satisfaction with pilot CBHI scheme was the dependent variable.

4.9.2. Independent variables

- The socio demographic characteristics of members
- Knowledge of members about the scheme
- Community based health insurance experience of members
- CBHI process and management related factors
- Health service provision related factors

5. Operational definitions

5.1. Satisfaction with CBHI

The overall satisfaction to the CBHI scheme was assessed based on 15 satisfaction questions developed from previous literatures. The study participants who scored above the mean score of satisfaction questions was labelled as satisfied and the score less than mean score was classified as dissatisfied

5.2. Knowledge about benefit package of CBHI

Seven items were used to assess the knowledge about benefit package and those who got more than four of the benefit packages was said to have adequate knowledge (14)

5.3. Experience of members with CBHI

The experience of members with CBHI was assessed based on the understanding of affiliates on what they experience in the type of facility they have visited. The views that CBHI affiliates have about health services uses.

5.4. CBHI Process and Management Related

The CBHI process and management related factors were assessed by using eight questions developed from different previous literatures in the field.

6. Data collection procedures

Data was collected with a structured questionnaire, which was administered with the help of health extension workers. Qualitative data was collected through FGD. The health extension workers collected the quantitative data by conducting a face-to-face interview with members of CBHI who are on exit from their respective health institutions after they have utilized the service provided. They used a structured questionnaire. Woreda CBHI officers supervised the quantitative data collection. semi structured interview guide questions were used to discuss on clients' perception of challenges that hinder performance of the scheme. A trained health professional conducted the FGD.

6.1. Data quality management

The questionnaire was checked for consistency by translating the English version to Amharic language. Study variables for this study was from review of previous studies. The questionnaire was administered to members of CBHI who are utilizing the service and still are members. Face to face, interview was conducted. FGDs were conducted for the qualitative data by using trained qualitative data collectors. They were given explanation on the questionnaire. The questionnaire was pretested to make sure it results what is needed. Data collection process was supervised as to whether it's being done correctly by trained supervisors.

6.2. Data entry and analysis procedures

Data were coded and entered into Epi data version 3.1 and then exported in to SPSS version 20 for analysis. Analysis of each variable is as follows: -

The socio demographic characteristics of respondents were described in terms of frequency, mean, median and IQR. The age, sex, marital status, family size, income and educational status were used to characterize members of CBHI who participate on this study. Median age was used to characterise the sample in terms of age. IQR was used to characterise the population in terms of income and family size. Bivariate analysis was used to see if there is relationship between satisfaction and different socio-demographic aspects of participants and other related factors

such as knowledge, experience of CBHI members, and CBHI process and management related factors. The satisfaction of participants was described by percentage and frequency. The factors associated was assessed by using binary logistic regression analysis. To explore the major challenges of the scheme FGDs were used for the qualitative part and the qualitative data was analysed by using thematic analysis and then analysis was carried out by using open code software.

7. Ethical consideration

Ethical approval was obtained from Addis Ababa university department of health sciences. And further ethical clearance was obtained from relevant bodies in their hierarchy, starting from regional health bureau to woreda health office. Participants was provided with the necessary information about the intent of the study and written consent was taken before they are a part of the study.

7.1. Dissemination of results

Findings of this study will be an input for further implementation of CBHI in Addis Ababa. The findings will be disseminated accordingly to the relevant bodies. These will include Ministry of health, Addis Ababa health bureau CBHI directorate and Ethiopian health insurance agency.

8. Result

8.1. Socio-demographic characteristics of study participants

A total of 404 study participants were enrolled in this study with a response rate of (96.42%). The majority of the study participants 274 (67.8%) were women. The mean age of the study participants is 45 years (ranging from 18 to 85 years of age) with (Sd of ± 14.38) years. Concerning the marital status, the majority of the study participants 226 (55.9) were married. Similarly, most of the study participants 245 (60.6) have average monthly income of above 1000 ETB. Only 89 (22.4%) of the study participants have an educational status of diploma and above diploma level (table, 1)

Table 1 : -Characteristics of the study participants

Variables	Satisfaction		Total
	Yes	No	
Age	N (%)	N (%)	
≤ 45 years	99 (24.5)	104(25.7)	203 (50.2)
>45 years	98 (21.8)	113 (28)	201 (49.8)
Sex			
Male	54(13.4)	76(18.8)	130(32.2)
Female	133(32.9)	141(34.9)	274(67.8)
Marital status			
Single	43 (10.9)	45 (11.1)	88 (21.8)
Married	91(22.5)	135 (33.4)	226 (55.9)
Divorced	29 (7.2)	13 (3.2)	42 (10.4)
Widowed	24 (5.9)	24 (5.9)	48 (11.9)
Educational status			
Grade 1 to 8	74 (18.3)	99 (24.5)	173 (42.8)
Grade 8 to 12	63 (15.6)	79 (19.6)	142 (35.1)
Diploma and above	50 (12.4)	39 (9.7)	89 (22.4)
Average Monthly Income			
≤ 1000 ETB	105 (26)	140 (34.7)	245 (60.6)
> 1000 ETB	82 (20.3)	77 (19.1)	159 (39.4)

8.2 Knowledge of the study participants

Nine items were used to assess the knowledge of the study participants towards the benefits of CBHI package. Almost all 399 (98.8%) of the study participants were aware that CBHI is a good

way of relieving CBHI members to off health expenditures. Likewise, the majority of the study participants have knowledge about the benefits of CBHI package. In this study having good knowledge is labeled as, if a participant successfully answered seven and above questions from a total of nine knowledge questions. Accordingly, 222 (55%) of the study participants have adequate knowledge about CBHI packages. (Table, 2)

Table 2 Knowledge about the principle of CBHI scheme

Variables	Frequency	Percentage
CBHI is good to off the expenses		
Yes	399	98.8
No	5	1.2
CBHI covers only public Institution		
Yes	371	91.8
No	33	8.2
CBHI covers expenses within country		
Yes	384	95
No	20	5
CBHI doesn't cover transportation		
Yes	370	91.5
No	34	8.5
CBHI covers only inpatient care		
Yes	389	96.5
No	15	3.7
CBHI covers only outpatient care		
Yes	394	95
No	20	5
CBHI doesn't covers cosmetic value		
Yes	333	83.4
No	67	16.6
CBHI covers surgical service		
Yes	120	29.7
No	284	70.3
CBHI covers dialysis until 3 month		
Yes	274	67.8
No	130	32.2
Overall level of knowledge on CBHI benefit package		
Yes	222	55
No	182	45

8.3 Experience of members on the CBHI

All the study participants who take part in this study had experience of visiting the health institutions after enrolled in CBHI scheme. The mean time of enrollment of the CBHI scheme is 24 months (ranging from 4 months to 72 months). According to the study participants, the

highest number of households 143 (35.4%) have decided to enrolled in CBHI scheme with the support of HEWs. The majority of the study participants 353 (87.4%) had visited the health center. Apart from these more than half of the study participants 220 (55.5%) have an experience of visiting the health institutions more than 5 times at the time of data collection. In relation to this most of the study participants 326 (80.7%) were happy with the permitted public health institutions. Moreover 259 (64.1%) and 281 (69.6%) of the study participants believed that, they got the required laboratory service and the correct prescribed drug during visiting the health institutions (Table, 3)

Table 3 Enrollment and experience with CBHI scheme

Variables	Frequency	Percentage
Who decide to enroll as a member		
Myself	117	29
Health care providers	77	19.1
Kebele administrators	67	16.6
HEWs	143	35.4
Which HC did you visit most		
Health center	353	87.4
Hospital	51	12.6
Frequency of visiting the health institution		
≤ 5 times	194	45.5
> 5 times	220	55.5
Are you happy with the permitted health institutions		
Yes	326	80.7
No	78	19.3
Did sick family members receive drug during the recent visit		
Yes	314	77.7
No	90	22.3
Do you think sick family members received the correct drug		
Yes	281	69.6
No	123	30.4
Did sick family members receive laboratory service		
Yes	295	77
No	109	23
Do you think you received the required laboratory service		

Yes	259	64.1
No	145	35.9
Have you ever participated on CBHI related meetings?		
Yes	101	25
No	303	75

8.4 Level of satisfaction with CBHI scheme

The reliability of the questions used to assess the level of satisfaction was assessed using Cronbach's Alpha. Household satisfaction level with CBHI scheme was assessed using 17 standardized questions. Each question used a five point Likert-scale from strongly disagree to strongly agree. The internal consistency of the 17 items tested using Cronbach's Alpha was found to be 0.831. The points obtained from the whole 17 questions were computed to get the total score of each respondent. A respondent had a minimum of 17 and a maximum of 64 points on the CBHI scheme satisfaction score. The median score of households were 36. In this study the median score was used to classify households as satisfied and not satisfied. Then households were categorized as satisfied if they score above the median score otherwise unsatisfied. Accordingly, the share of study participants who are satisfied with the community based health insurance was found to be 46.3%. As indicated in the table among study participants whose age below 45 years 99 (24.5%) of the study participants were satisfied with CBHI program. whereas 104(25.7%) were not satisfied. Likewise, the number of females 133 (32%) satisfied with CBHI program were more than the number of males 54(13.4%). Concerning the educational status and average; no significant difference regarding satisfaction among the different educational achievement

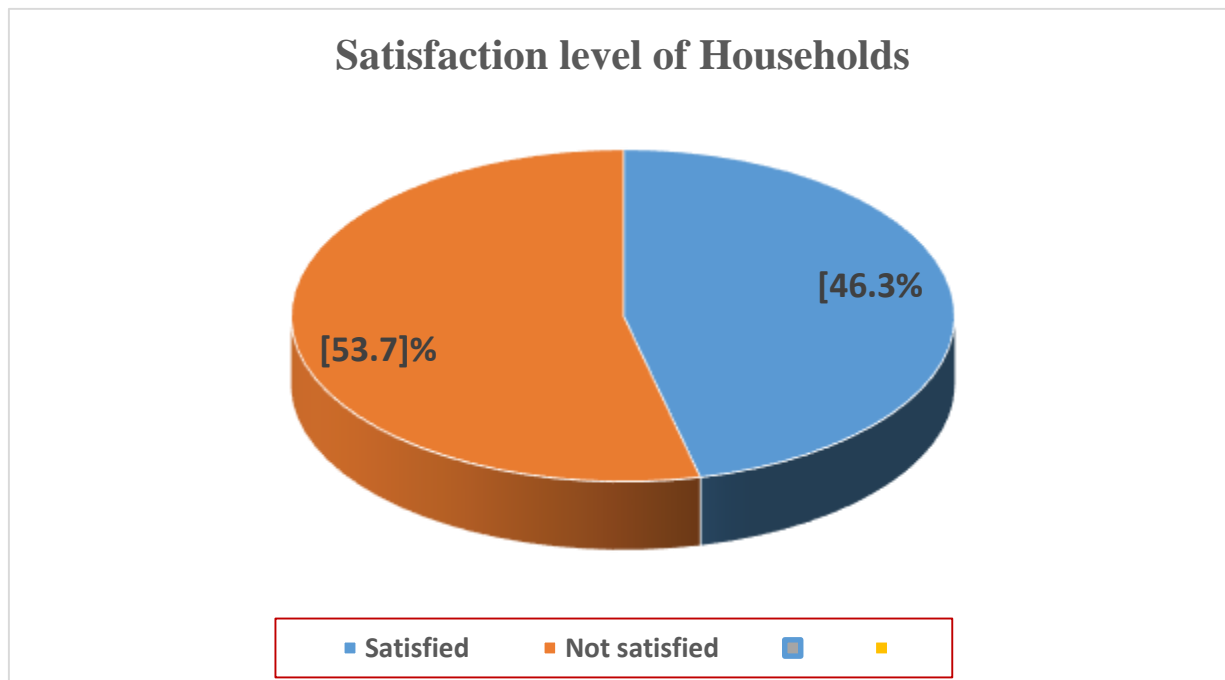


Figure 1. Satisfaction level of households on CBHI scheme

Variables	Satisfaction	
	Yes	No
Age	No (%)	No (%)
< 45 years	99 (24.5)	104(25.7)
>45 years	98 (21.8)	113 (28)
Sex		
Male	54(13.4)	76(18.8)
Female	133(32.9)	141(34.9)
Educational status		
Grade 1 to 8	74 (18.3)	99 (24.5)
Grade 8 to 12	63 (15.6)	79 (19.6)
Diploma and above	50 (12.4)	39 (9.7)
Average Monthly Income		
≤ 1000 ETB	105 (26)	140 (34.7)
> 1000 ETB	82 (20.3)	77 (19.1)

8.5 Result of Factors associated with CBHI satisfaction level

Bivariate analysis was used to identify the factors associated with household satisfaction level towards CBHI scheme. Variables that were significant at 0.2 in the bivariate logistic regression analysis were further examined in the multivariate analysis to see their relative effects of association with households CBHI satisfaction level. Accordingly, the result of the bivariate analysis showed that some of the socio-demographic characteristics of the study participants and CBHI experience related variables, and health service related variables were significantly associated with household's satisfaction to CBHI scheme

In this study Households who have educational status of grade 1 to 8 were 42% less likely to be satisfied with community health insurance scheme compared to households who have educational level of diploma and above (COR = 0.58, 95% CI: 0.35, 0.98). Whereas study participants who have an educational level of grade 8 to 12 did not show any association with the overall satisfaction level (COR = 0.62, 95% CI: 0.37, 1.06)

The bivariate analysis also revealed that study participants who are happy with CBHI regulations were more likely to be satisfied with CBHI scheme compared with households who were not satisfied with the permitted public health institutions (COR = 1.95, 95% CI: 1.16, 3.28). Similarly households who received drug from the health institutes (COR =1.62, 95% CI: 1.01, 2.59), study participants who assumed and got the correct drug during their recent visit (COR =2.36, 95% CI: 1.53, 3.64), study participants who got the required laboratory service (COR=1.75, 95% CI: 1.16, 2.64), Households who got respect and compassionate care from the health professionals (COR =5.46, 95% CI: 3.18, 9.36), and health professionals who got immediate care during visit (COR = 5.46, 95% CI: 3.18, 9.36) were statistically significant association with the overall satisfaction level (Table, 4)

8.6. Result of multivariate Analysis

Variables that have a significant association at a p-value 20% in the simple binary logistic regression analysis were further examined in the multiple binary logistic regression analysis to control the confounding factors and to see their real association with the outcome variable. The

result of the multivariate analysis showed that study participants whose age lies in between 40 to 49 were 45% less likely to satisfy with CBHI scheme compared to study participants above 50 years old (AOR= 0.55, 95% CI: 0.31, 0.96). Similarly, study participants who were happy with CBHI regulations were almost 2 times more likely to satisfy with CBHI scheme compared to their counterparts (AOR= 1.96, 95% CI: 1.12, 3.46). Households who think they got the right prescribed drug during the recent visit were 1.77 times more likely to satisfy with CBHI scheme compared to their counterparts (AOR= 1.77, 95% CI: 1.08, 2.93). In addition to these in this study participants who got immediate care during health facility visit were almost 5 times more likely to satisfy with CBHI program (AOR = 4.95, 95% CI: 2.72, 8.98). Households who believed that the permitted public health facilities have adequate medical equipment's were 1.65 times more likely to satisfy with CBHI program compared to their counterparts (AOR= 1.65, 95% CI: 1.02, 2.69). Likewise, households who believed that the permitted public health facilities have adequate qualified health personnel were 1.89 times more likely to satisfy by the program compared to their counterparts (AOR =1.89, 95% CI:1.12, 3.20) (table, 4)

Table 4 Bivariate and Multivariate logistic regression analysis results on factors associated with overall household's satisfaction level in Addis Ababa, 2021

Variables	Satisfaction		COR (95% CI)	AOR (95% CI)	AOR
	Yes	No			P-value
Age of the study participants					
< 30 years	35	23	1.69 (0.92, 3.11)	1.77 (0.91, 3.45)	.094
30 - 39 years	35	36	1.08 (0.62, 1.88)	1.12 (0.63, 2.10)	.642
40 – 49 years	37	69	0.60 (0.36, 0.99)	0.55 (0.31, 0.96)	.037
≥50 years	80	89	1	1	
Educational status					
Grade 1 to 8	74	99	0.58 (0.35, 0.98)	†	
Grade 8 to 12	63	79	0.62 (0.37, 1.06)		
Diploma and above	50	39	1		
Average monthly income					
< 1000 ETB	105	140	0.87 (0.47, 1.05)		
> 1000 ETB	82	77	1		
Overall knowledge on CBHI benefit package					

Yes	90	92	1.26 (0.85, 1.87)	†	
No	97	125	1		
There are valid CBHI regulations					
Yes	161	165	1.95 (1.16, 3.28)	1.96 (1.12, 3.46)	.021
No	26	52	1	1	
Do you think received the correct prescribed drug?					
Yes	112	169	2.36 (1.53, 3.64)	1.77 (1.08, 2.93)	.025
No	75	48	1		
Do you think received the required laboratory service					
Yes	107	152	1	†	
No	80	65	1.75(1.16, 2.64)		
Availability of good laboratory service					
Agree	121	187	1	†	
Disagree	66	30	3.40 (2.09, 5.54)		
Got immediate care during visit					
Agree	118	196	1	1	
Disagree	69	21	5.46 (3.18, 9.36)	4.95 (2.72, 8.98)	<.001
Got respect from health service providers					
Agree	140	194	1	†	
Disagree	47	23	2.83 (1.64, 4.89)		
Health care providers were friendly					
Agree	112	176	1	†	
Disagree	75	41	2.89(1.84, 4.50)		
HF permitted have Adequate ME					
Agree	72	118	1		
Disagree	115	99	1.90(1.28, 2.83)	1.65 (1.02, 2.69)	.042
HF permitted have adequate qualified personnel					
Agree	123	143	1	1	
Disagree	64	74	1.01(0.66, 1.52)	1.89 (1.12, 3.20)	.017

†= dropped in the final model

8.6. Perception of CBHI beneficiaries about challenges of the program

The analysis from qualitative data suggests the following challenges of CBHI program implementation in Addis Ababa.

8.6.1. Shortage of drugs in the permitted public health facilities (Them 1)

Shortage of drugs in the permitted public health facilities is one the leading deliberated challenge by the majority of the FGD discussants. Although CBHI benefit package is supposed to cover all outpatient costs of the beneficiary, significant number of the FGD discussants were complaining on the unavailability of drugs in the permitted public health facilities

One of the FGD participant reflected that: *I got the services both from health centers and hospitals when I was referred.to hospital. I faced a problem most of the time. This is mainly due to the lack of laboratory services and absence of prescribed drug at pharmacy rooms. Even though I get referred to hospitals to get a better laboratory service and medications, the reality is opposite. I get referred out to private institutions for both services this makes me unsatisfied with the service*

Another FGD discussant also commented the following:

The problem with both hospitals and health centers is that the medications and laboratory services ordered are not available within the institutions. This is a big problem for us since we have to pay from our pocket to get these services. In turn we don't even get our money back from CBHI. Because there is no system to get our money back after we paid from our pocket at private institutions, it makes me so sad So it would be very nice for us if this problem gets solved.

8.6.2. Absence of kenema pharmacy in their nearby place (theme 2)

The other challenge mentioned by the participants was absence of Kenema pharmacy in their nearby place to get the prescribed drug easily. According to the FGD discussants travelling long distance to get Kenema pharmacy and ordered drugs makes them very disappointed.

In relation to this, one of the FGD discussant explained that: *“In addition to what has been mentioned by the previous discussants, we don’t have Kenema pharmacy in our Woreda. We have to go far from here to find Kenema pharmacy, so it would be so nice if one was built for us nearby. Because most of us are very old people and it is tiresome and inconvenient for us to travel long distance to find drugs. Apart from this transport fee is also a problem for us. More over occasionally the pharmacy professionals also send us back to the health centre if there is a problem with the prescription. All these things are cumbersome for us”*

8.6.3. Disrespect and poor attitude of health professionals (theme, 3)

According to the FGD data one of the main challenge reported by the majority of the participants is that disrespect and poor attitude of health professionals towards CBHI members. Disrespect and poor attitude of health professionals was one of the boldly visible extract from a focus group qualitative data.

With regard to this one of the FGD participant said that: *“The main problem at Kenema pharmacies is their attitude towards CBHI members. They do not serve us as similar as those who are not CBHI members. I remember one time I was having a prescription paper and another patient who is not a member also got the same prescription paper. The pharmacist received the prescription paper and gave the medication to that person but said it was not available for me. Accordingly, I went to buy from private pharmacy it is really saddening or embarrassing anyways”*

Another FGD participants also pointed out that both CBHI members and others were not treated equally and explained the following: *“I get disappointed most of the time when I go to kenema pharmacy to get the service. The problem is that pharmacists who work there did not treat CBHI members and others who are not members equally. For instant during my previous health center visit. I got the service and the doctor gave me prescription paper to get medication from this health centre but the prescribed drug was not available. Then I went to Kenema pharmacy to get the prescribed drug. When I told the pharmacist that I am a member of CBHI his facial expression was changed and not happy. He gave me the medication any ways but he didn’t treat*

me well. However, when another customer who paid for the medication comes, he treated him with respect”

8.6.4. Lack of laboratory and other diagnostic service in the permitted public health facilities (theme, 4)

CBHI schemes were considered useful to cover health expenditures of the members. The aim was to reduce financial barriers and improve access to health services by reducing the burden. CBHI members supposed to get all the complete service such as diagnostic and treatment services. In line with the above stated expectations the majority of the FGD discussants reported the lack of laboratory and other diagnostic service in the permitted public health facilities. One of the FGD participant explained the following: *“The problem in the health centers is that most of the laboratory services are not available and I got sent to private institutions for that service. At hospitals the same problem happens. Even if the laboratory service is available the long cue makes it impossible to get the service on time. To get some diagnostic services like ECG we have to wait for a month or so, if we don’t want that we have to get it done at private centres and it’s really costly for us”*

8.6.5. Health professionals lacked awareness about CBHI scheme (theme, 5)

Strikingly the FGD participants witnessed that health professionals lacked awareness about CBHI scheme in accordance with this one of the FGD participant commented the following: *“I agree with what explained by the other colleagues. I faced the same problem when I was getting a service from there. I don’t think even the pharmacists who are working in Kenema pharmacies understood the costs incurred by CBHI members gets reimbursed from CBHI scheme. The government should create an awareness creation session about CBHI scheme for them as they are making us unsatisfied with the service, we get from CBHI”*

Similarly, another discussant also explained his experience as follows: *“When I went to hospitals, I wait long hours at card rooms and attitude of health professionals towards CBHI members is not positive. I remembered this one time where I brought my two children to the hospital and the card room lady and the health professional gave me different orders mainly because I am a CBHI member”*

With regard to this one of the FGD participant forwarded the following recommendations: *“In addition to what has been said, the problem at kenema pharmacy should not be forgotten. I think the government should create an awareness for them so that they understood the case and provide the service equally for CBHI members and others who are not members of CBHI”* in addition another participant also suggested that *“The government needs to work hard on the attitude of health professionals particularly pharmacists working at Kenema pharmacy”*

8.6.6. Rigid premium payment modality (theme, 6)

The premium payment modality also another challenge for the beneficiaries. Owing to the low economic status of the beneficiaries, the payment modality was not convenient as explained by the FGD participants. In relation to this one of the FGD participant motioned the following: *“I am not against the amount of the fee that I pay, but the problem is the fixed time payment modality because it is hard to find and pay this amount of money at once. If the payment could be made on a two times basis it would help a lot to cover the premium fee without stress”*

9. Discussion

This study aimed to assess the satisfaction of CBHI members and associated factors among households who are members of CBHI scheme. In this study, the level of satisfaction with the CBHI scheme was found to be 46.3%. The finding of this study was almost similar with the previous studies conducted in Sheko 54.7 % of the members of CBHI scheme were satisfied with the scheme (2), another study conducted in the Anilemo district Hadiya Zone Southern Ethiopia also reported that the magnitude of household satisfaction with CBHI scheme was 54.1% (20), However, another study done in Damotwoyde district of Wolyta zone in SNNR reported that the satisfaction of members towards CBHI scheme was found to be 91.38 %(11). The possible reason for this discrepancy might be due to the difference in the socio-demographic characteristics of the respondents, the tools used to measure the satisfaction level of households, and the time difference of the study. This study used 17 standardized questions using a five-point Likert-scale to assess the overall household satisfaction level. The internal consistency of the 17 items tested using Cronbach's Alpha was found to be 0.831. Whereas the study conducted in Sheko and Damotwoyde district of Wolyta zone in SNNR used only 6 questions scale to assess the overall satisfaction level. (2, 11) This is one of the possible reasons for this discrepancy because asking more questions towards satisfaction may probe more problems on CBHI enrollment.

In this study households whose age lies between 40 to 49 years were less likely to satisfy with CBHI scheme compared to households age greater than 50 years (AOR= 0.55, 95% CI: 0.31, 0.96). The finding of this study in line with the previous studies conducted in Southern Ethiopia (3), Nigeria (14), and Turkey (21) This might be attributed to the difference in the expectation of the service and the frequency of getting the service. Older people get more frequent illness compared to younger people. When the frequency of visiting the health, facilities increased and got the service without paying out of their pocket the likelihood of satisfying with the service also increased as illustrated in the previous study. (11)

Households who were happy with CBHI regulations were two times more likely to satisfy with CBHI enrollment compared to their counterparts (AOR= 1.96, 95% CI: 1.12, 3.46). The finding

of this study was similar with the previous studies conducted in Damotwoyde district of Wolyta zone in SNNR the possible reason might be households who have a better understanding of the regulations of CBHI scheme have a higher chance of satisfying with the service. (11)

In accordance with the previous studies (2, 11) in this study households who agreed that sick family members received the correct prescribed drug during their recent visit were more likely to satisfy with CBHI scheme compared to their counterparts (AOR=1.77, 95% CI: 1.08, 2.93). The possible reason as mentioned by Addise et al, 2021 might be due to households who enrolled and did not get the right prescribed drugs in a public health facility were obliged to pay additional costs for private pharmacies, which might be the causes of dissatisfaction with the CBHI scheme.

Study participants who got immediate care during their visit were five times more likely to satisfy with CBHI scheme compared to their counterparts (AOR= 4.95, 95% CI: 2.72, 8.98). The finding of this study was in agreement with the previous studies conducted in Rwanda (16) reported that households who received immediate and respectful care during the recent visit were more likely to satisfy with CBHI scheme. It is well known that households who got immediate care during visiting the health facilities will have a better level of satisfaction compared with households who encounter delay during their visits.

Households who agreed that the permitted health facilities have adequate medical equipment were more likely to satisfy with CBHI scheme compared to households who didn't agree (AOR= 1.65, 95% CI: 1.02, 2.69). The finding of this study is scientifically plausible because households who assumed to get proper treatment with adequate medical equipment's have a better chance of satisfaction with the program compared to those who were not agreed with the adequacy of medical equipment

Apart from these study participants who believed that the permitted health facilities have adequate qualified personnel were more likely to satisfy with CBHI scheme compared to their counterparts (AOR=1.891, 95% CI: 1.2, 3.20). Study participants who believed with the qualification and competency of health professionals found in the permitted public health facilities were more likely to satisfy with the service they got from those health facilities

Moreover, the qualitative part of this study pointed out that shortage of drugs in the permitted health facilities, absence of kenema pharmacy in their nearby place, disrespect and poor attitude of health professionals, lack of laboratory and other diagnostic service in the permitted public health facilities, health professionals lacked awareness about CBHI scheme, and rigid premium payment modality are major challenges of CBHI implementation.

10. Strength and Limitation of the Study

This is a community-based study conducted in all sub cities of Addis Ababa with mixed study design hence this could be considered as a strength of the study. Concerning the limitation one the quality of the data might be affected since data collection was done during Covid 19 pandemic. The other one, self-reported data may attenuate the association observed between the factors and the outcome variable.

11. Conclusions and Recommendations

11.1. Conclusions

Health service equity and quality are important indicators in achieving universal health coverage goals. To achieve these goals, establishing a sustainable community-based health care financing system is indispensable. Understanding the level of client satisfaction towards community-based health insurance was one of the major factors to ensure the sustainability of CBHI program. This study aimed to determine the level of satisfaction and the associated factors using mixed study design among CBHI members living in Addis Ababa.

Source of data for this study was primary data collected from CBHI beneficiaries. Both quantitative and qualitative data has been collected. Face to face interview was done with a structured questionnaire for the quantitative data and FGD was used for the qualitative data. Accordingly, 419 households who are CBHI beneficiaries have participated on the study and 6 FGDS each involving 8- 12 participants have been conducted. Quantitative analysis was done by using Epi info version 3.1 and SPSS version 20. Thematic analysis has been done for the qualitative data.

The findings of this study revealed that less than half of the study participants were satisfied with the CBHI scheme in the Addis Ababa. Study participants who agreed with the presence of valid CBHI regulations, households who think they got the right prescribed drug during the recent visit and study participants who got immediate care during health facility visit were more satisfied than their counter parts. In addition, satisfaction of households was significantly higher in those members of CBHI who agreed that the permitted public health facilities have adequate medical equipment's, and households who believe that the permitted public health facilities have adequate qualified health personnel.

Apart from these, the FGD discussants deliberated the challenges of the program implementation such as shortage of drugs, disrespect and poor attitude of health professionals, and lack of laboratory service. Moreover, the other themes identified were absence of kenema pharmacy in

their nearby place, health professionals lacked awareness about CBHI scheme, and rigid premium payment modality

11.2 Recommendations

The government of Ethiopia has implemented CBHI to insure universal health coverage. Hence, to improve service provision understanding the satisfaction level of CBHI members, the following measurements need to be considered to enhance satisfaction of target population.

- Addis Ababa health bureau should conduct further investigations on the availability of medications, medical equipment required both at health centers and at hospitals.
- This study found that CBHI members who were aware about the regulations were more satisfied. Therefore, the bureau together with sub city and woreda should assess the awareness of CBHI members.
- Immediate and respectful care was also another important factor for satisfaction of clients. Therefore, the bureau together with sub cities should do assessment on the way CBHI clients are treated both at hospitals and at health center.
- Qualification and competency of professionals was also found to highly affect satisfaction of clients. The bureau should do further assessments on the qualification of health professionals at hospitals and health centers.
- The absence of Kenema pharmacy within their vicinity was mentioned as a major concern by FGD discussants. Therefore, the bureau should assess the accessibility of Kenema pharmacies to members. building Kenema pharmacies in accessible distances. in addition, the bureau should assess the attitude of pharmacists at kenema pharmacies towards CBHI clients.

References: -

- 1. Minyihun A, Gebregziabher MG, Gelaw YA. Willingness to pay for community-based health insurance and associated factors among rural households of Bugna District, Northeast Ethiopia. BMC Research Notes. 2019;12(1).**
- 2. Kebede KM, Gebretsadik SM. Household satisfaction with community based health insurance and associated factors in piloted sheko district: South West Ethiopia. PLoS Biol. 2019;14(5).**
- 3. Jembere MY. Role of community based health insurance on health service provision and health seeking behavior of Households in rural Ethiopia:The case of Tehuledere district,South Wollo zone. 2017.**
- 4. Mirach TH, Demissie GD, Biks GA. Determinants of community-based health insurance implementation in west Gojjam zone, Northwest Ethiopia: a community based cross sectional study design. BMC Health Serv Res. 2019;19(1):544.**
- 5. MOH. Ethiopian 7th Health Accounts Report. 2016/17.**
- 6. Jembere MY. Community Based Health Insurance Scheme as a New Healthcare Financing Approach in Rural Ethiopia: Role on Access, Use and Quality of Healthcare Services, the Case of Tehuledere District, South Wollo Zone, Northeast Ethiopia. Family Medicine & Medical Science Research. 2018;07(02).**
- 7. MOH. Ethiopia Health Sector Transformation Plan. 2015.**
- 8. CSA. Central Statistics Agency Population Projection for Ethiopia 2007-2037. 2013.**
- 9. Waelkens M-p, Coppieters Y, Laokri S, Criel B. An indepth investigation of the causes of persistent low membership of community-based health insurance;a case study of the mutual health organaization of dar naim,Moritania. BMC Health Serv Res. 2017;17:535.**
- 10. Adeniji OA, Awojobi ON, Abe JT. Community based health insurance and health out comes in Sub -Sahran Africa; Evidence from a systematic review. international journal of community research. 2019;8(2):49-58.**

11. **Badacho AS, Tushune K, Ejigu Y, Berheto TM. Household satisfaction with a community-based health insurance scheme in Ethiopia. BMC Res Notes. 2016;9(1):424.**
12. **Donfouet PPH, Mahieu AP. Community Based Health Insurance and Social Capital. Health Economics Review. 2012;2:5.**
13. **Sarker AR, Sultana M, Ahmed S, Mahumed RA, Morton A, Kahan JAM. Clients experience and satisfaction of utilizing health care service in a community bases health insurance program in Bangladish. Environmental and public health. 2018;15(1637).**
14. **Yilma Z, Mebratie A, Sparrow R, Dekker M, Alemu G, Bedi AS. Impact of Ethiopia's Community Based Health Insurance on Household Economic Welfare. The World Bank Economic Review. 2015;29(suppl 1):S164-S73.**
15. **<Molla Yismaw.pdf>.**
16. **Mukangendo M, Nzayirambaho M, Hitimana R, Yamuragiye A. Factors contributing to low adherence to Community based health insurance in rural Nyanza district,Southern Rwanda. environmental and public health. 2018;2018:9.**
17. **. !!! INVALID CITATION !!! (2).**
18. **Workneh SG, Biks.G.A, Woreta SA. Community based health insurance and communities scheme requirement compliance in Tehuledere district,North East Ethiopia: cross-sectional community-based study. BMC 2017;9:353-9.**
19. **MOH. Health facilities by ownership in Addis Ababa. DHIS2. 2021.**
20. **Addise T, Alemayehu T, Assefa N, Erkallo D. The Magnitude of Satisfaction and Associated Factors Among Household Heads Who Visited Health Facilities with Community-Based Health Insurance Scheme in Anilemo District, Hadiya Zone, Southern Ethiopia. Risk Manag Healthc Policy. 2021;14:145-54.**
21. **Bank w. Social Reinsurance, A new Approach to Sustainable Community Health Financing. 2002.**

Annex

Participant Information Sheet and Voluntary Consent (English Version)

My name is _____. I am working as data collector for the study being conducted in this health center by Biruktawit Abebe Balcha who is studying her Master's degree at Addis Ababa University College of health science, school of public health. I kindly request you to lend me your attention to explain to you about the study and why you are selected as the study participant.

The study title: Household satisfaction with a community based health insurance and associated factors in Addis Ababa

Purpose of the study: the findings of this study can be of a paramount importance for Addis Ababa health bureau in improvement of service provided by community-based health insurance.

Procedure and duration: questions will be provided to you by health extension worker. This questionnaire may take up to 20 minutes

Risks and benefits: You are not at any form of risk by participating in this study

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

Rights: Participation in this study is voluntary. You have the right to declare to participate or not in this study. If you decide to participate, you have the right to withdraw from the study at any time and this will not label you for any loss of benefit, which you otherwise are entitled. You do not have to answer any question that you do not want to answer.

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

- Biruktawit Abebe: Mobile number (+251)-912-415145)
- Email Address: senayetabebe@gmail.com

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

Consent form for FGD

This focus group discussion is prepared to further understand the challenges that are hindering CBHI not to perform as well as it should be.

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

The discussion will approximately take about 90 minutes. Although this will take much of your time, your contribution will be of paramount importance in improving the quality of service provided by CBHI. I would like to inform you that I will be recording your voice for analysis of the information latter in my study. I highly assure you that it will only be used for the study and no other purpose.

Signature of the participant: _____

Signature of data collector: _____ Date: _____

5. 1998年12月31日，某公司资产总额为1000万元，负债总额为400万元。2000年12月31日，资产总额为1200万元，负债总额为500万元。该公司2000年所有者权益增加了多少万元？

二、多项选择题

1. 下列各项中，属于所有者权益的有（ ）。
A. 实收资本 B. 资本公积 C. 盈余公积 D. 未分配利润
E. 应付账款 F. 预收账款 G. 应收账款 H. 长期股权投资
I. 短期投资 J. 长期待摊费用 K. 递延所得税资产 L. 递延所得税负债
M. 其他综合收益 N. 其他权益工具 O. 其他流动资产 P. 其他非流动资产
Q. 其他流动负债 R. 其他非流动负债 S. 其他综合收益 T. 其他权益工具
U. 其他流动资产 V. 其他非流动资产 W. 其他流动负债 X. 其他非流动负债
Y. 其他综合收益 Z. 其他权益工具

2. 下列各项中，属于所有者权益的有（ ）。
A. 实收资本 B. 资本公积 C. 盈余公积 D. 未分配利润
E. 应付账款 F. 预收账款 G. 应收账款 H. 长期股权投资
I. 短期投资 J. 长期待摊费用 K. 递延所得税资产 L. 递延所得税负债
M. 其他综合收益 N. 其他权益工具 O. 其他流动资产 P. 其他非流动资产
Q. 其他流动负债 R. 其他非流动负债 S. 其他综合收益 T. 其他权益工具
U. 其他流动资产 V. 其他非流动资产 W. 其他流动负债 X. 其他非流动负债
Y. 其他综合收益 Z. 其他权益工具

3. 下列各项中，属于所有者权益的有（ ）。
A. 实收资本 B. 资本公积 C. 盈余公积 D. 未分配利润
E. 应付账款 F. 预收账款 G. 应收账款 H. 长期股权投资
I. 短期投资 J. 长期待摊费用 K. 递延所得税资产 L. 递延所得税负债
M. 其他综合收益 N. 其他权益工具 O. 其他流动资产 P. 其他非流动资产
Q. 其他流动负债 R. 其他非流动负债 S. 其他综合收益 T. 其他权益工具
U. 其他流动资产 V. 其他非流动资产 W. 其他流动负债 X. 其他非流动负债
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Number	Questions	Options		Skip
Section: 1 socio-demographic characteristics				
101	What is your age?	-----years (current age in years.)		
102	What is your sex?	1. Male 2. Female		
103	What is your current marital status?	1. Single 2. Married 3. Separated / divorced 4. Widowed		
104	How many family members are there in the household?	----- numbers		
105	What is your current religion?	1. Orthodox 2. Protestant 3. Catholic 4. Muslim 5. Others (specify)		
106	What is your current educational status?	1. Able to read and write 2. Primary school 3. Secondary school 4. Diploma 5. Degree and above		
107	What is your occupation	1. Self employed		

		2. Private employed 3. Government employed 4. Other		
108	How much is your estimated annual income?	----- Ethiopian birr		
Section 2 Knowledge on CBHI package				
201	CBHI is a good way to relieve clients off health expenditures?	1. Yes 2. No		
202	CBHI covers only costs from public institutions.	1. Yes 2. No		
203	CBHI covers only care with in the country.	1. Yes 2. No		
204	CBHI does not cover transportation fee	1. Yes 2. No		
205	CBHI covers inpatient care	1. Yes 2. No		
206	CBHI covers outpatient cost	1. Yes 2. No		
207	CBHI does not cover medical care related to cosmetic values	1. Yes 2. No		
208	CBHI covers coasts related to surgical service	1. Yes 2. No		
209	CBHI covers cost related to dialysis until three months	1. Yes		

		2. No		
Section 3 Experience with CBHI members				
301	Who decided to enroll as a member of the CBHI scheme?	1. My self 2. HCP 3. Kebele administrators 4. HEWs 5. Others (specify)		
302	Length of enrolment	----- months		
303	Which health institution did you visit?	1.health centers 2. Hospitals 3. Both health center and hospital		
304	How many times did you visit? _____			
305	According to CBHI regulations users are required to visit public health centers within the district. Are you happy with the permitted health institutions?	1. Yes 2. No		
306	During the recent visit to the health institutions, did sick family members receive drug?	1. Yes 2. No		
307	During the recent visit to the health institutions, do you think sick family members received the correct prescribed drug?	1. Yes 2. No		
308	During the recent visit to the health institutions, did sick family members receive laboratory service?	1. Yes 2. No		
309	During the recent visit to the health institutions, do you think that sick family members received the required laboratory service?	1. Yes		

		2. No		
310	Have you ever participated on CBHI related meetings?	1. Yes 2. No		
Section 4 CBHI process and management related factors				
401	Can an individual, excluding family members be a part of CBHI scheme?	1. Yes 2. No		
402	Is membership fee paid every time you want renew your membership?	1. Yes 2. No		
403	Do members need to pay premium if they did not use health care in the previous year?	1. Yes 2. No		
404	Can members get eye glass service as part of the benefit package?	1. Yes 2. No		
405	Can members get service from hospitals without first visiting health centers	1. Yes 2. No		
406	Is the schedule to pay the premium is continent for you	1.yes 2. No		
407	The time to make use of CBHI program after payment of registration fee is ok for you	1. yes 2.No		
408	The collection process of insurance cards is appropriate	1. yes 2.No		
409	The opening hours of CBHI office is suitable for the beneficiaries	1.yes 2. No		
Section 5 Health service provision related questions				
501	Household members were satisfied with laboratory service	1. Agree		

		2. Disagree		
502	House hold members got immediate care when visiting the health facility	1. Agree 2. Disagree		
503	Household members got respect from health service providers	1. Agree 2. Disagree		
504	Health care providers were friendly	1. Disagree 2. Agree		
505	Do you think that the health facilities permitted have adequate medical equipment	1. Agree 2. Disagree		
506	Do you think that the health facilities permitted have adequate qualified health practioners	1. Agree 2. Disagree		
Section 6 satisfaction level of CBHI members				
601	Opening hours of CBHI office at woreda is suitable to get service	1. strongly disagree 2. Disagree 3. Neutral 4. Agree 5. strongly agree		
602	There is timely dispensing of insurance cards	1. strongly disagree 2. Disagree 3. Neutral 4. Agree		

		5. strongly agree		
603	The gap between dispensing of insurance cards and making use of cards to get health service is appropriate	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree		
604	Fee payment time for membership is suitable	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree		
605	The CBHI management is trust worthy	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree		
606	Enough information is provided about CBHI	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree		

607	The service package provided is enough	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree		
608	The fee to become members is affordable	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree		
609	Happy with the facilities in deal with the scheme and giving service	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree		
610	It is ok to pay premium every year despite not using the service in the previous year.	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree		

611	The place where fee is collected is convenient and suitable for the service	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree	
612	Paying additional payment for older children and relatives living with family is ok	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree	
613	Availability of means whereby the community can voice the claims on bad services	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree	
614	Enrolment in the scheme eases referral to superior health facility	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree	

615	Availability of medicines prescribed to CBHI affiliates at health facility	1.strongly disagree 2.Disagree 3.Neutral 4. Agree 5. strongly agree	
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Section 7 Guiding Questions for the FGD	
701	Can you please tell us what you know about CBHI program? (participants knowledge about the program)
702	What made you interested to become member of CBHI scheme?
703	Do you think the members of CBHI satisfied by the services they got from the program?
704	What do you think are the factors that affect the satisfaction of the members of CBHI scheme?
705	What were the challenges during registration to become members?
706	What are the challenges related to amount of fee payment?
707	What are the challenges related to the timing of fee payment?
708	What challenges did you face when getting service at health center?
709	What challenges are you facing when getting service at hospitals?
710	What challenges did you face while getting service at Kenema pharmacies?
711	What other challenges can you mention that should be dealt with to improve the performance?

Questionnaire in Amharic language

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Curriculum Vitae

Personal Information	<p>Full Name: Biruktawit Abebe</p> <p>Date of birth: February 19, 1990</p> <p>Sex: Female</p> <p>Nationality: Ethiopian</p> <p>Address: Mobile: +251-912-41-51-45</p> <p style="text-align: right;">Email: senayetabebe@gmail.com</p> <p>Addis Ababa, Ethiopia</p>
Work Experience	
<p>July 1, 2020 - Present</p> <p>Major duties and Responsibilities</p>	<p><i>Non communicable disease officer</i> at Addis Ababa regional health bureau, Addis Ababa, Ethiopia</p> <ul style="list-style-type: none"> ➤ Supervise government health institutions to assure quality of health care delivery

	<ul style="list-style-type: none"> ➤ Give technical advice to health workers working at chronic OPD ➤ Provide training to professionals in health institutions about NCDs and M&E tools used in NCDs
Dec 1-2019- July 1 2020 Major duties and Responsibilities	<p><i>Quality Assurance officer</i> at Addis Ababa regional health bureau, Addis Ababa, Ethiopia</p> <ul style="list-style-type: none"> ➤ Supervise government health institutions to assure quality of health care delivery ➤ <i>Make sure the implementation of national guidelines EHSTG and ECHRIG ON Hospitals and Health centers respectively</i>
Feb 1, 2015 – Dec 1, 2019 Major duties and Responsibilities	<p><i>Community based health insurance (CBHI) Quality Assurance Officer</i> at Yeka sub city health office Addis Ababa, Ethiopia</p> <ul style="list-style-type: none"> ➤ Creating awareness about CBHI to the community, political leaders at sub city level and Woreda level and health professionals of different levels ➤ Data quality assurance of CBHI members ➤ Clinical auditing at health facilities in deal with CBHI scheme before payment is made to the facility for service provided to CBHI members ➤ Prepare periodic reports as required
Dec 13, 2013 – Feb1, 2015: Major duties and Responsibilities	<p>Public health officer at Dalo Sewa health center West Wolega , Ethiopia</p> <ul style="list-style-type: none"> ➤ Provided trainings for health extension workers on IMNCI ➤ Work as clinician in the outpatient department, reproductive health, MCH, TB, FP and under five children clinic ➤ Responsible for monitoring the technical activities of the health center ➤ Worked as VCT counselor and peer supervisor ➤ Worked as supervisor for health posts
Educational Background	

Oct 2010_july 2013	BSC Degree in Public Health from Haromaya university, Ethiopia				
Jun 2009	Certificate, Ethiopian High School leaving Examination				
Short term trainings					
May 16-19, 2013	Syndromic management of STI organized by west Wolega zonal health office in collaboration with ICAP west Wolega zonal health office, Ethiopia				
Feb 2-6/2018	-Training on basics of CBHI (community-based health insurance) -Training on how to carry out clinical auditing -training on how to manage data of CBHI members				
Nov 1- 3, 2019	TOT on quality improvement at Addis Ababa city administration health bureau, Adama Ethiopia				
Dec 13- 17 /2019	TOT on AYH (adolescent and youth health), organized by Addis Ababa city administration health bureau, Adama				
Personal Skills					
Language	Language	Listening	Speaking	Reading	Writing
	Amharic	Excellent	Excellent	Excellent	Excellent
	English	Excellent	Excellent	Excellent	Excellent
Communication skills	<ul style="list-style-type: none"> ➤ Team work ➤ Organizational / managerial ➤ Coordinating Skills 				
Computer skills	<ul style="list-style-type: none"> ➤ MS Window ➤ Excel ➤ PPT 				

