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HOUSEHOLD HEADS SATISFACTION WITH COMMUNITY BASED HEALTH INSURANCE SCHEME AND ASSOCIATED FACTORS AMONG ENROLLEES OF BIBUGN DISTRICT, EAST GOJJAM ZONE, NORTHWEST ETHIOPIA

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BAHIR DAR UNIVERSITY COLLEGE OF MEDICINE AND HEALTH SCIENCES, SCHOOL OF PUBLIC HEALTH, DEPARTMENT OF HEALTH SYSTEM MANAGEMENT AND HEALTH ECONOMICS

HOUSEHOLD HEADS SATISFACTION WITH COMMUNITY BASED HEALTH INSURANCE SCHEME AND ASSOCIATED FACTORS AMONG ENROLLEES OF BIBUGN DISTRICT, EAST GOJJAM ZONE, NORTHWEST ETHIOPIA.

BY:-YASAB LEYKUN (PHO).

A THESIS RESEARCH SUBMITTED TO THE DEPARTMENT OF HEALTH SYSTEM MANAGEMNT AND HEALTH ECONOMICS, SCHOOL OF PUBLIC HEALTH, COLLEGE OF MEDICINE AND HEALTH SCIENCES, BAHIR DAR UNIVERSITY IN THE PARTIAL FULFILLMENT OF THE REQUIRMENT FOR THE DEGREE OF MASTERS IN HEALTH SYSTEM AND PROJECT MANAGEMENT

JUNE, 2021

BAHIR DAR, ETHIOPIA

BAHIR DAR UNIVERSITY, COLLEGE OF MEDICINE AND HEALTH SCIENCES SCHOOL OF PUBLIC HEALTH, DEPARTMENT OF HEALTH SYSTEM MANAGEMNT AND HEALTH ECONOMICS

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FULL TITLE OF THE RESEARCH PROJECT	LEVEL OF SATISFACTION WITH COMMUNITY BASED HEALTH INSURANCE SCHEME AND ASSOCIATED FACTORS AMONG HOUSEHOLDS IN BIBUGN DISTRICT, EAST GOJJAM ZONE, NORTHWEST ETHIOPIA.
STUDY PERIOD	MARCH 1-30/ 2021
STUDY AREA	BIBUGN DISTRICT, EAST GOJJAM ZONE, NORTHWEST ETHIOPIA

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ACRONYMS

ANRSHIA……Amhara National Regional State Health Insurance Agency

CBHI…….....Community Based Health Insurance

CRC……..Compassionate, Respectful and Caring

E.C…….....Ethiopian Calendar

EHIA…….....Ethiopian Health Insurance Agency

FHCSH…….Felege Hiwot Comprehensive Specialized Hospital

FMOH…….....Federal Ministry of Health

HSTP…….....Health Sector Transformation Plan

LIC…….....Low Income Countries

LMIC……..Low and Middle Income Countries

NGO…….……..Non-Governmental Organization

NHIS……..National Health Insurance Scheme

OOP……....Out Of-pocket Payment

PCA……....Principal Component Analysis

SDG…….....Sustainable Development Goal

SHI…….....Social Health Insurance

SNNP…….Southern Nations, Nationalities and Peoples

UHC…….....Universal Health Coverage

VIF…….....Variance Inflation Factor

WHO…….....World Health Organization

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ABSTRACT

Background: Community based health insurance scheme is an emerging strategy for providing financial risk protection against health-related poverty. Household satisfaction with the insurance scheme is more likely to affect their decision to remain enrolled and entrance of new members as well. However, studies focusing on households' satisfaction on the community based health insurance scheme and factors associated with it are generally scarce in Ethiopia, and it has not been studied at all in the study area.

Objective: To determine level of satisfaction with community based health insurance scheme and associated factors among heads of households in Bibugn district, Northwest Ethiopia, 2021.
Method: A community based cross-sectional study was conducted in households of Bibugn district from March 1-30, 2021. Systematic random sampling technique under multi-stage sampling was used to select study participants. A face to face interview on a total of 604 households was conducted by using pre-tested structured questionnaire. Descriptive analysis, bivariable and multivariable logistic regression analysis was conducted. Variables with p-value<0.2 were included in multivariable logistic regression. Hosmer and Lemeshow goodness of fit test was checked for model fitness and found p=0.292. P-value of < 0.05 was considered as statistically significant to determine independent predictors of household satisfaction.

Result: The level of household's satisfaction with CBHI scheme was found to be 56.1%. Satisfaction was found significantly associated with old age(AOR=1.85; 95% C.I 1.17-2.94), rural residence(AOR=4.13; 95% C.I 2.24-7.62), visit to health center only (AOR=0.34; 95% C.I 0.20-0.55), <5km distance to health facility(AOR=3.18; 95% C.I 1.82-5.55), agreement with prescribed drugs(AOR=2.31; 95% C.I 1.36-3.92), healthcare providers friendliness(AOR=3.65; 95% C.I 2.18-6.10) and good knowledge of benefit packages(AOR=3.00; 95% C.I 1.93-4.67).

Conclusion: This study showed that the overall satisfaction of households in Bibugn district with the CBHI scheme was good. Old age, rural residence, type of health facility visited, <5km distance to health facilities, friendliness of health care providers, agreement with prescribed drugs, and good knowledge of CBHI benefit packages were found to be significant predictors of satisfaction. Consideration should be given for increasing accessibility of health care facilities, improving Compassionate, Respectful and Caring (CRC) practice, improving quality of health care providers and improving enrollee's knowledge of CBHI benefit packages.

1. INTRODUCTION

1.1 Background

Health is a basic need of every human being to have a good living, to be productive, and to be able to compete in improving living standard(1). However, no country in the world is able to fully and effectively provide health coverage to citizens due to lack of spending money for health care services. Evidences show that not only developing countries even advanced countries like USA can't offer health service cover to all citizens and around 46 million Americans have insufficient health services coverage(2).

The World Health Organization (WHO) stated that direct out of-pocket payments(OOPs) for health care-related services is a pressing situation; as at least half of the people in the world do not receive the health services they need, more than 100 million people are pushed into extreme poverty each year and around 12% of the world's population(Over 930 million people) spend at least 10% of their household budgets to pay for health care(3). Low-and middle income countries (LMICs); mostly from Africa and Asia, take the greatest proportion of this population. In these countries, health care services are unaffordable and even unavailable to the majority of poor people, and health spending via OOPs is difficult for many people and millions of people fall into poverty due to the need to pay for healthcare(4).

As half of the world's population are still unable to obtain essential health services; WHO has recommended that all member countries of the United Nation achieve universal health coverage (UHC) status by 2030 as a part of the recent sustainable development goals(SDG). According to the UHC theme, all individuals and communities who need health services should receive services without suffering financial hardship(3).

To overcome the financial hardships associated with OOP expenditure and achieve UHC, several countries in both high- and low-income countries adopted different pre-payment insurance system of financing health services, which includes community based, social and private insurances. Particularly, the government of Ethiopia has introduced two types of health insurance programs since 2010; community based health insurance which intends to cover 85% of the populations of Ethiopia who are engaged in the informal sectors and social health insurance (SHI) which intends to cover 10.46% of the population who are engaged in formal sectors(5).

CBHI is an emerging form of micro health insurance, which is an overarching term for health insurance that is targeted to low-income people. The specific feature of CBHIs is the community involvement in driving its setup and in its management(20). It is usually a voluntary not-for-profit institution that works based upon the principle of solidarity in which community members pool funds to offset the cost of healthcare. In addition, CBHI has the assumptions reducing the possibility of adverse selection, linkage with healthcare provider and an underlying ethic of mutual aid trust, enrollment, and solidarity. CBHI schemes vary in a great deal in terms of whom they cover, how, for what, and at what cost. The majority of CBHI schemes operate in rural areas, and their members are relatively the poor population(21, 22).

According to the 2020 (2013 E.C) revised bylaw of the Amhara National Regional State Health Insurance Agency, the benefits packages of CBHI include all curative and preventive cares that are part of the essential health package of the country including both outpatient and inpatient service utilization at public facilities and private facilities in bureaucratic referral system. Hence, enrolled households are not allowed to seek care in private facilities unless a particular service or drug is unavailable at a public facility and got referral. The scheme excludes treatment abroad, kidney dialysis, services like eye glasses and treatments with large cosmetic value. The referral procedure requires members to visit health centers before they are referred to hospitals (district or regional) and those who do not follow this referral procedure their costs of medical treatment will not be covered totally(27).

Entrance of new enrollees and renewal of enrollment are mandatory for sustainability of CBHI scheme and these are more likely to be affected by enrollee's satisfaction with the insurance scheme. Client satisfaction is often associated with positive emotions drawn from interaction with health service providers and quality of care in all aspects, and it can be used as a measurement of both an outcome and as an indicator of the quality of care. Dissatisfaction of households with operation of the CBHI program is more likely to affect their decisions to remain enrolled in the CBHI scheme which ultimately makes the scheme less attractive to new members (7-9). Assessing the enrollees' satisfaction is one of the measurements that has great role to identify the gaps in quality delivery of health care services for clients. Furthermore, client experience and opinion are very crucial for improving health care services, shaping health polices and providing feedback on the quality, availability and responsiveness of health care services(10). Thus, this study aims to assess the level of CBHI scheme satisfaction and associated factors at households of Bibugn district.

1.2 Statement of the problem

CBHI scheme is an emerging and growing tool for providing financial risk protection to deprived individuals against health-related events and it is expected to help to achieve the World Health Assembly call on all countries to move towards UHC, especially in low income countries (LICs) where there is a significant inequality in health service delivery (11, 12). However; poor quality of care, low adherence, limited resource mobilization, and poor sustainability have been the challenges to an effective implementation of the CBHI scheme(13). For instance, according to a recent report of Ethiopian Health Insurance Agency (EHIA), though the renewal rate shows increment (from 54% in 2007 to 82% in 2012 E.C); a significant number of dropouts at each year were observed in actual number and CBHI enrollment coverage is about only 37% of population in informal sector. According to the report, dropout is still a challenge to sustain CBHI program, and this may be due to either dissatisfaction and/or voluntary nature of the insurance system(6). The same is true in the study district. For instance, in this year (2013 E.C) a 12%(n=1670 households) dropout rate was reported in the study district(14).

Enrollees of CBHI expect better quality of care. Thus, for satisfaction of clients and sustainability of the scheme, it is crucial to provide better quality of care. However, a study finding in Burkina Faso found insured people objectively receive the worse quality of care than uninsured(15). This indicates that CBHI enrolment status alone could not be a guarantee for getting quality health care services and to bring user satisfaction. On the other hand, evidences also show that level of household satisfaction varies from region to region and from time to time (16-19).

As to evidences, since satisfaction with CBHI scheme and contributing factors varies from region to region and from time to time, repeated studies are needed to be conducted to know the level and associated factors of household satisfaction with CBHI scheme and to take corrective measures accordingly. But only few studies were conducted in Ethiopia, of which most of them are at institutional level. Only few studies at community level were conducted in southern part of Ethiopia. As to my knowledge, no study was conducted on satisfaction of CBHI users at community level in Amhara region. Studies conducted in the region are at institutional level and on a specific segment of a population. This may lack representativeness since patients may change their behavior or their satisfaction level may be affected by performance of that specific institution. In addition, institutional based studies focus more on

health service related factors, and issues related to scheme process and management, households experience in the scheme, and knowledge on CBHI benefit packages are ignored.

On the other hand, studies conducted in southern part of Ethiopia did not use important variables like residence and distance to health facilities as an independent predictor of household satisfaction with scheme and failed to stratify urban and rural enrollees before sample size selection(17, 18). In addition, it is expected that there may be difference in socio-demographic characteristics between population of Southern and Northern part of Ethiopia. Moreover, there may also present difference in rules and regulations of CBHI scheme which may create difference in satisfaction of enrollees, since regions are given the right to ratify/modify their own CBHI bylaw.

The program of CBHI scheme has been started in the study district since March 2009 E.C (2017 G.C). However, enrollee's level of satisfaction and the contributing factors in the area are not yet studied. Hence, whether the scheme has brought quality health care and enrollees have a positive perception towards CBHI scheme which can be measured by CBHI enrollee's satisfaction is not known so far in this study area.

The reason that inspires me to select this topic and conduct a research on the area was that, my birth place is from Bibugn district (the study area) and I hear repeated complaints from my socials who are CBHI users. Mostly they complain that, even though they perceive their illness/medical cases needs to be seen by higher professionals in higher institutions (referral hospitals), health professionals at health centers are not willing to give them referral. This complain was very impressive for me and I planned to conduct a CBHI users satisfaction study on the area.

1.3 Significance of the study

Assessing satisfaction of households on CBHI is crucial to identify not only quality of healthcare service delivery but also their attitude and perception on overall operation of the program which is important to improve it by learning from their experience. It can provide feedback on quality, availability and responsiveness of health care services and can be used as an input to shape insurance policies as well as health policies. Therefore, this study might be used to recommend policy makers like EHIA, the district and its health institutions and other programmers to take measurements, improve satisfaction and increase acceptance of CBHI scheme by the communities which will in turn have a positive impact for the community when it is implemented. The study might again be important for recommending

partners who work in the area of health development like non-governmental organizations (NGOs) who work on the issue. Finally, it could be used as a reference for researchers who may conduct related studies in the future.

2. LITRATURE REVIEW

2.1 Level of household satisfaction with CBHI

Huy and colleagues observed that satisfaction has a significant impact on client retention, loyalty and influences the efficient delivery of quality in health care (28). Previous studies reported different level of household satisfaction on insurance schemes that can be influenced by different factors including socio-demographic factors, scheme experience related factors, health service related factors, and scheme knowledge factors (17, 18).

On a cross-sectional household survey conducted in Bangladesh on total of 233 CBHI beneficiaries in 2014, an overall satisfaction level of 4.17 out of 5 (83.4%) was reported. This study targets only health services provision-related satisfaction and used average of maximum score to determine overall satisfaction(29). But different from this result, an overall satisfaction of 53.3% was reported in a facility based cross-sectional study conducted in Istanbul, turkey on national health insurance (NHI)(30).

In a cross-sectional study conducted in Ghana in 2015, an Overall 53.12% of insured clients were dissatisfied with the services of providers(31). Similar to this, in a cross-sectional insurance satisfaction survey conducted in northern Nigeria, less than half (42.1%) of the respondents reported being satisfied with health insurance(19). On the other hand, in another hospital-based descriptive cross-sectional study carried out among NHIS patients attending a general Outpatient in Abuja, Nigeria in 2017 an overall average satisfaction score of 58.1% was reported(32).

In a community based cross-sectional CBHI scheme satisfaction study conducted on 386 households in Damotwoyde district, Wolaita zone, SNNRS of Ethiopia, an overall household satisfaction of 91.38 % was reported(17). In this study the satisfaction score was calculated based on the percentage of maximum scale and this might overestimate the proportion of households satisfied. On the other hand, in another community based cross-sectional CBHI scheme satisfaction studies conducted in southern part of Ethiopia in 2018 at Sheko district, Benchi-Maji zone and in 2020 at Anilemo District, Hadiya Zone, only a moderate level of satisfaction that is 54.7% and 54.1% respectively was reported(16, 18). Furthermore, in another CBHI scheme satisfaction study conducted in 2019 at Felege Hiwot Referral Hospital, Bahir Dar Ethiopia on 317 CBHI user women patients; a 50.2% level of satisfaction was reported(33).

2.2 Factors affecting households satisfaction with CBHI

Previous studies showed that socio-demographic factors including age, marital status, level of educational, occupation, family size, household income and residence affect enrollee's satisfaction with health insurance. In addition, factors related to provision of health services including provision of proper laboratory service, friendliness of providers, waiting time and availability of prescribed drugs also affect enrollee's satisfaction. Furthermore, knowledge of enrollee's on health insurance benefit packages and experience of households in the scheme are also factors that are most likely to influence CBHI users' satisfaction which will in turn affect renewal rates and new uptake in the CBHI scheme (15-19, 30, 34).

2.3.1 Socio-demographic factors

On a cross-sectional household survey conducted in Bangladesh, higher level of overall satisfaction score was observed among females, middle-aged and elderly, low education, small size of household and housewife. In this study overall satisfaction shows negative associations with being a beneficiary living with four to five and more than five household members and being a businessman(29). Similar to this, in a facility based cross-sectional study conducted in Istanbul, Turkey, the socio- demographic variables age, gender, marital status, level of education, occupation and area of residency were significant predictors of satisfaction. In this study old age, female gender, being married, low level of education, being working group, and urban residency respectively were significantly associated with better satisfaction(30). But, contrary to the study in Istanbul, Turkey, urban residency had a significant negative impact on overall patient satisfaction with quality of care in a study conducted in Burkina Faso(15).

Marital status was also a significant predictor of satisfaction in a cross-sectional insurance satisfaction survey conducted in northern Nigeria, with respondents with polygamous status were more satisfied than others(30). On the other hand, age group and level of education were also significant predictors of satisfaction in a hospital-based descriptive cross-sectional study carried out among NHIS patients attending a general Outpatient in Abuja, Nigeria. Respondents in the youngest age group were least satisfied compared to those in the oldest age group and respondents with primary level of education were the least satisfied compared to others. But there were no statistically significant differences in the average satisfaction scores among the sex, marital status, religious groups and duration of enrollment (32).

But, different from the above, in a facility based comparative satisfaction study between insured and non-insured patients in India, the variables age, gender, literacy and economic status did not determine satisfaction levels (35).

In a community based cross-sectional CBHI scheme satisfaction study conducted in Wolaita zone, SNNRS of Ethiopia, socio demographic factors: age, family size, and estimated annual income were statistically associated with households CBHI scheme satisfaction. According to this report age change in one year increased CBHI members' satisfaction score by an average of 0.011. On the other hand, an average increase in one family size decreased the satisfaction score by an average of 0.074(17). Similarly, another community based cross-sectional study conducted in Anilemo District, Hadiya Zone, Southern Ethiopia, socio demographic factors age and households wealth were significantly associated with CBHI scheme. In this study, older households and those in the poor category were more satisfied with CBHI scheme(16).

2.3.2 Health service provision related factors

In a cross-sectional study conducted in Ghana in 2015 in which an overall 53.12% of insured clients were dissatisfied with the services of providers, the perceived poor satisfaction was due to challenges that clients face when accessing health services. Factors, such as benefit package of insurance and discrimination were significantly associated with perceived satisfaction with health services. Insured clients who had all their health services covered under NHIS were 3.04 times more likely to be satisfied with service providers compared with those who were not able to cover them. In addition, insured clients who perceived to be discriminated at the health facility were 0.43 times less likely to be satisfied with service providers compared with those who did not experience such discrimination (31).

On the other hand, in another comparative study conducted in Ghana between insured and non-insured patients, there was no significant difference between the insured and uninsured groups with regard to the perception of friendliness of medical staff, satisfaction at the reception, records departments and in consultation rooms. In this study satisfaction with consultation, waiting time and friendliness of staff were significantly associated with overall satisfaction of patients at 5% level of significance for both insured and non-insured (36).

In a cross- sectional study conducted on 398 patients seeking outpatient consultations at thirteen primary care facilities contracted with the CBHI scheme in one district of Burkina Faso, CBHI enrollment was found to have significant and positive impact on the overall

patient satisfaction with quality of care. In this study, shorter perceived waiting time had a significant positive impact on overall patient satisfaction with quality of care(15).

In a community based cross-sectional CBHI scheme satisfaction study conducted in Wolaita zone, SNNRS of Ethiopia, health service related determinants: satisfaction with laboratory services provision and service providers' friendliness were associated with satisfaction score(17). In addition, in another community based cross-sectional CBHI scheme satisfaction study conducted in 2018 at Sheko district, Benchi-Maji zone, Southwestern region of Ethiopia, agreement with laboratory service received was significantly associated with households' satisfaction. Those who agreed with the laboratory services received were more satisfied (18).

In another recent community based cross-sectional study conducted in Anilemo District, Hadiya Zone, Southern Ethiopia, agreement with laboratory services received, and getting prescribed drugs and agreement with it was significantly associated with household's satisfaction with CBHI scheme(16).

In a facility based comparative cross sectional study of satisfaction with Primary Health Care Services between Insured and Noninsured patients conducted in 2017 at Tehuledere district, Amhara region, insured patients show a statistically significant score of better satisfaction than non-insured patients. In this study, the variables availability of medicines for all illnesses and friendliness of their assistants were found to have a statistically significant difference between insured and non-insured outpatients under the CBHI scheme(37). In addition, shorter waiting time was significantly associated with CBHI scheme satisfaction on another study conducted in 2019 at Felege Hiwot Comprehensive Specialized Hospital(FHCSH), Bahir Dar, Ethiopia on CBHI user women patients(33).

Furthermore, another health service related factor that is distance of households to access healthcare facilities was reported to be associated with both with voluntary uptake of CBHI scheme and dropping out from it and this may be linked with satisfaction of households with CBHI scheme(38-40). Proximity to health facilities was reported to increases satisfaction while longer distances was reported to reduce health care satisfaction in a study conducted in Ghana(41).

2.3.3 Factors related to households experience in CBHI scheme

In a community based cross-sectional CBHI scheme satisfaction study conducted in households in Wolaita zone, SNNRS of Ethiopia, experiences of households since CBHI enrollment like length of time premium paid and frequency of payment were significantly associated with satisfaction. Households who had paid the premium three times had an average decrease of 0.58 in CBHI satisfaction compared to households who paid the premium over three times. Households who paid the premium twice a year had an average decrease of 0.32 in CBHI satisfaction compared to households that paid monthly. In addition, voluntary enrollment(decision to enroll as a member of the CBHI scheme made by themselves) was also associated with satisfaction and most of the participants reported as they had experience in participating in a CBHI related meetings(17).

In addition, in another community based cross-sectional CBHI scheme satisfaction study conducted in 2018 at Sheko district, Benchi-Maji zone, Southwestern region of Ethiopia, length of enrollment, type of health facility visited and frequency of health facility visit were significantly associated with households' satisfaction. Households who enrolled >12 months and those who visited hospitals were more satisfied(18). Furthermore, significant difference in satisfaction was reported with length of enrolment in a study conducted in Nigeria; in which, respondents with longer length of enrolment in the insurance were more satisfied, while those with shorter length of enrolment in the insurance were less satisfied(19).

In addition, type of insurance plan was reported as significant predictor of satisfaction in a study of Istanbul, Turkey. Those households who were green card holders were significantly more satisfied than the other three plans(bag-kur, Social Insurance Organization(SSK) and Government Employees Retirement Fund (GERF))(30). Moreover, a systematic review by Bayked et.al showed that community participation like local meetings had a positive relationship with CBHI utilization which can be linked with members' satisfaction with CBHI scheme(42).

2.3.4 Knowledge on insurance scheme

In a cross-sectional insurance satisfaction survey conducted in northern Nigeria, general knowledge of health insurance and awareness of monetary contributions significantly influenced enrollee's satisfaction with health service provision in the health insurance scheme. Insured persons with more knowledge of the health insurance scheme were more

satisfied than those with less knowledge. Enrollees with more awareness of the monetary contributions in the health insurance were more satisfied than those with less awareness(19).

In addition, in a community based cross-sectional CBHI scheme satisfaction studies conducted in 2018 and in 2020 in Southern region of Ethiopia, participants knowledge of CBHI benefit packages was significantly associated with household's satisfaction to CBHI scheme. According to these studies, those households who had adequate knowledge of CBHI benefit packages were more satisfied (16, 18).

3. CONCEPTUAL FRAMEWORK

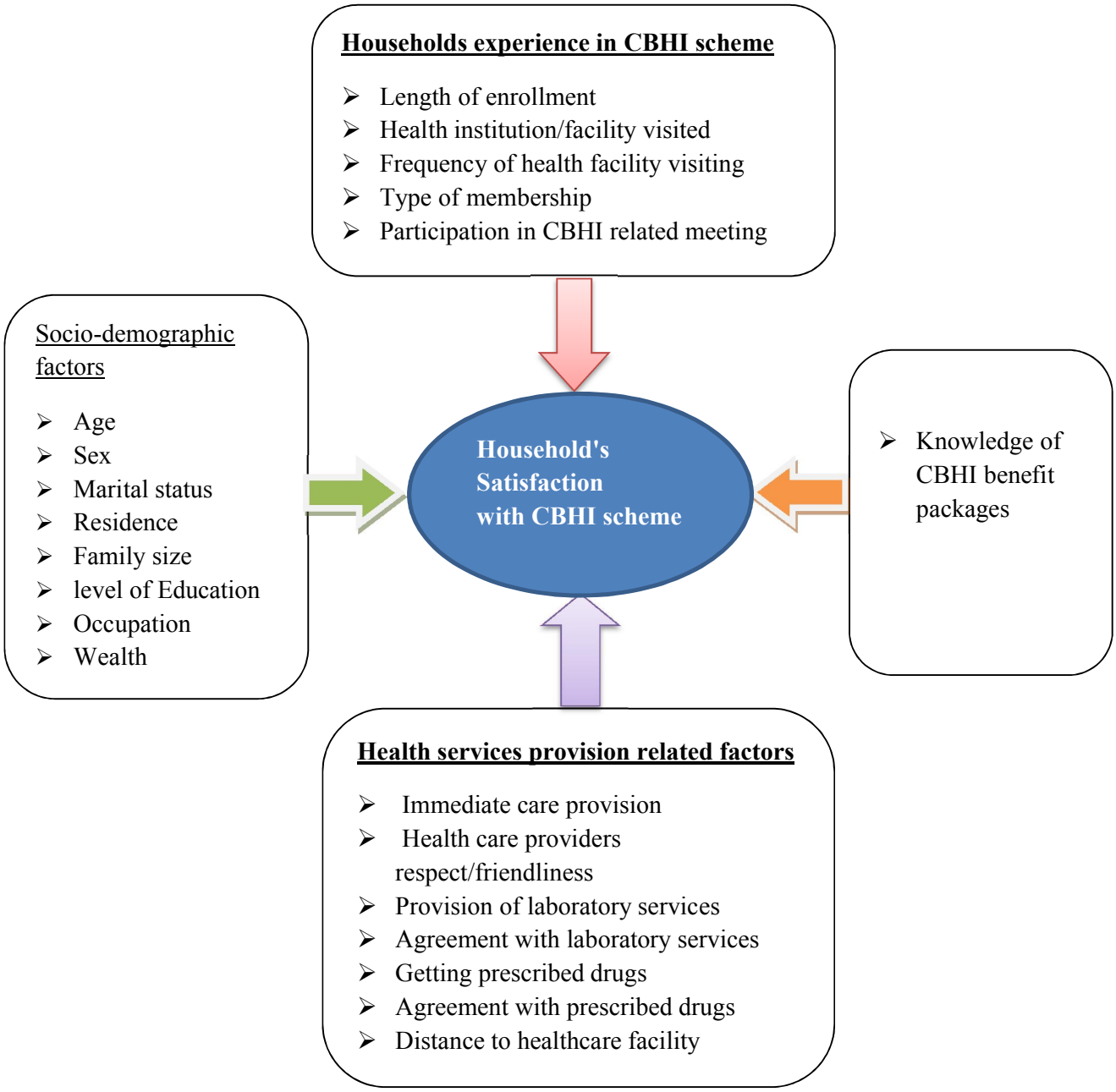

Figure 1: Conceptual framework for the study of household satisfaction with a CBHI scheme and associated factors in Bibugn district, East gojjam zone, Northwest Ethiopia 2021. (16-18)

4. OBJECTIVES

General objective:-

- To assess level of satisfaction with CBHI scheme and associated factors among heads of households in enrollees of Bibugn district, East gojjam zone, Northwest Ethiopia, 2021.

Specific objectives:-

- To determine the level of household satisfaction with CBHI scheme.
- To identify factors affecting the satisfaction of households with the CBHI scheme.

5. METHODOLOGY

5.1 Study design

A community-based cross-sectional study was conducted to assess the level of satisfaction and associated factors with CBHI scheme.

5.2 Study area and period

This study was conducted from March 1 up to 30, 2021 in Bibugn district, East gojjam zone, Northwest Ethiopia. The district is found 379 km away from Addis Ababa and 143 km from Bahir Dar (from the town of the district; Digo tsion). The district has 19 kebeles (the lowest administrative unit in Ethiopia); 4 urban and 15 rural, and an estimated total population of 97,626. Currently 81% of the households in the district are enrolled in the CBHI scheme(14). The district has one district hospital, four health centers and 18 health posts(43).

5.3 Population

5.3.1 Source population

All CBHI user households in Bibugn district

5.3.2 Sample population

All CBHI user households in selected kebeles of Bibugn district

5.3.3 Study population

Sampled households in the selected kebeles of Bibugn district

5.3.4 Study unit

Household heads who were interviewed during the study period.

5.4 Eligibility criteria

5.4.1 Inclusion criteria

Households who are member and had at least one family member who visited public health facilities at least once starting from their enrolment in CBHI scheme were included.

5.4.2 Exclusion criteria

Participants(household heads) who were seriously sick and unable to give response, and households who did not have at least one family member who visited public health facilities at least once starting from their enrolment in CBHI scheme were excluded.

5.5 Sample size determination

The sample was calculated for both main and specific objectives by using single population proportion formula $(Z\alpha/2)^2 * p(1-p)/d^2$ and the maximum were used.

First, sample size was calculated by assuming 54.7% of households are satisfied with CBHI scheme taken from a study conducted previously in Ethiopia(18), a confidence level of 95% and a 5% margin of error. Sampling was followed a multi-stage sampling procedure. To account this, the sample size was multiplied by the design effect of 1.5. Finally 10% non-response rate was added, and the final sample size was calculated to be 630.

$$n = \frac{Za/2^2 * p(1-p)}{d^2}$$

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

n =380.8~381

n*design effect(1.5)=571.5~572

n= 572+ Nr (10%) = 629.2~630

Where: n = minimum sample size, z = standardized normal distribution curve /value for the 95% confidence interval (1.96), p = satisfaction of CBHI users in previous study (54.7%), d = margin of error (5%) and Nr = Non- response rate (10%)

Sample size was also calculated by using factors associated with households' satisfaction with CBHI scheme. From the above study, households having adequate knowledge of CBHI benefit packages, who visited only hospitals, who agreed with the laboratory services received and those with ≥12 month's length of enrollment were factors that were significantly associated with households satisfaction with CBHI scheme. Thus, by taking the respective proportion of those households, confidence level of 95%, 5% margin of error, design effect of 1.5 and 10% non-response rate, sample size was calculated as follows.

Table 1: sample size calculation using associated factors of CBHI scheme satisfaction

Variable	Proportion	Sample size
Having adequate knowledge of the CBHI benefit packages	45.7%	630
Households who visited only hospitals	14.8%	320
Households who agreed with the laboratory services received	87.9%	270
Households with enrollment length ≥12 months	69.1%	542

Therefore, the maximum sample size; that is **630** was taken as the final sample size.

5.6 Sampling technique and procedure

A stratified multi-stage sampling technique was employed to select the study participants. In order to eliminate selection bias, simple random sample selection method was applied to select study kebeles and systematic random sampling method was applied to select study participants in each study kebeles. First of all, the kebeles were stratified into urban and rural kebeles. In the second stage, 30% of kebeles at each stratum were selected using a lottery method. Then, the sample size was proportionally allocated to each selected kebeles and households enrolled in CBHI in the selected kebeles were identified using their individual enrolment identification number from the registration book through the help of health extension workers. Finally, the study participants were selected using systematic random sampling method. The value of K (constant) was determined by dividing the total number of enrollees in each selected kebeles to their allocated sample size and was found to be 9 for each kebeles. One number from 1-9 was randomly selected in each kebele by lottery method and then every 9^{th} value starting from the randomly selected number was taken as a sample.

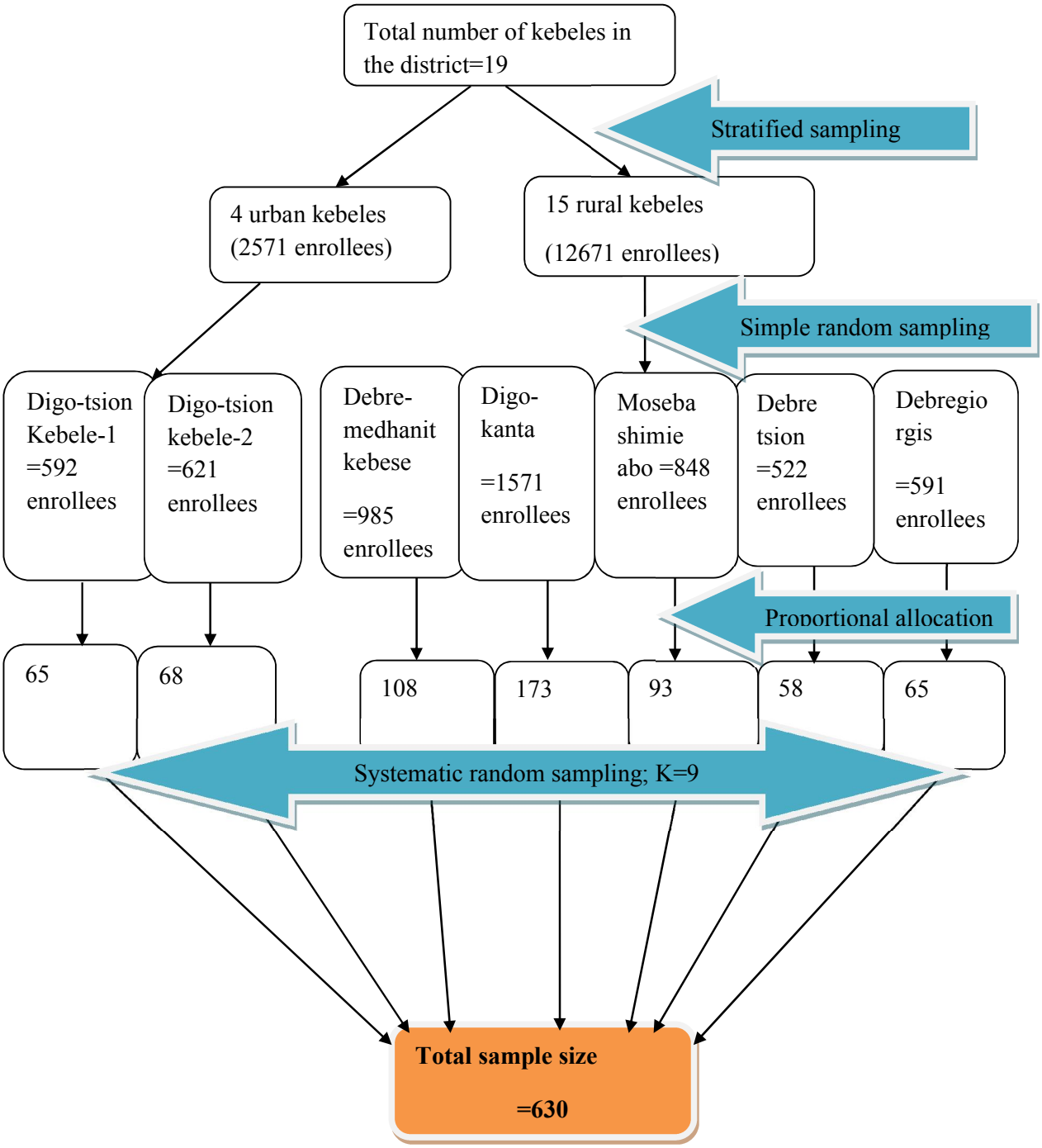

Figure 2: Sampling procedure of study participants in Bibugn district, Northwest Ethiopia, 2021.

5.7 Data collection and quality assurance

A structured questionnaire was used. It was developed by reviewing various literatures (16-18, 39). The questionnaire was prepared in English and was translated from English to Amharic language. Data was collected by face to face interview with head of households at home. Data collection was conducted from March 1 up to 30 by Four degree holder nurses who are fluent in Amharic.

Before data collection, a pretest was conducted in Sinan district (neighboring district of Bibugn) on 5% (n=32) of the sample size. Based on the result of the pretest, adjustments were made accordingly to the data collection tool. Spot checks on the quality of data collection were made in the field and completeness of questionnaires was checked daily. Data collectors were given a two days training on the study objectives, method of data collection, data collection tool, and on ethical principles. One senior public health officer having BSC was recruited to supervise data collectors. A second visit was made for households of whom their house was closed during the data collection period. Households in which their houses closed during the second visit were considered as non-respondents.

5.8 Operational definitions and measurement

Households overall satisfaction: The household head's overall satisfaction to the CBHI scheme was considered as an outcome variable. Ten items related to satisfactions on a five point likert scale from strongly disagree to strongly agree was used. The ten items are: 1) the local CBHI management is trustworthy; 2) I am satisfied with the opening hours of the CBHI office; 3) I am satisfied with the collection process of insurance cards; 4) I am satisfied with the time interval to use services of the CBHI program after registration (payment of registration fee); 5) I am satisfied with schedule of registration(contribution payment); 6) I am satisfied with information provided; 7) I am satisfied with permitted health institution (according to the CBHI regulation CBHI users are required to visit first public health centers within the district/zone and follow line of referral) 8) I am satisfied with CBHI benefit packages; 9) I want to stay enrolled in the CBHI scheme and; 10) I recommend others to be a member of CBHI. Then, households were labeled as satisfied if their response was ≥ median score of satisfaction questions otherwise they were labeled as not satisfied. The tool for measuring satisfaction and method of measurement was taken from previous similar studies(16, 18).

Knowledge of CBHI benefit package: Households were asked the following eight items related to the CBHI benefit packages: 1) CBHI is a good way of helping clients to health expenditure; 2) CBHI covers only care from public health institutions; 3) CBHI covers only care within the country; 4) CBHI doesn't cover transportation fee; 5) CBHI covers outpatient care; 6) CBHI covers inpatient care; 7) CBHI doesn't cover medical care for cosmetic values and 8) CBHI doesn't cover cost of kidney dialysis . Households was labeled as having adequate knowledge if they answered more than or equal to the median CBHI benefit packages questions. Otherwise, they were labeled as not having adequate knowledge of CBHI benefit packages. This scoring method was taken from previous similar study(18).

Wealth Index: is the score which show the households economic status. It was assessed by using respondents' reported assets: farmland, crops production, livestock, infrastructure (refrigerator, TV, radio, bed, phone, bicycle, motorcycle etc.), sanitary condition, housing conditions, dwelling construction, water source and other vital items in the household. Household wealth index was computed using principal component analysis (PCA). Variables with no outlier frequency (<5% and >95%) were used for PCA and variables with communality values greater than 0.5 were used to create factor scores. Households were categorized as poor, medium and rich by taking previous similar study as a reference(16).

Distance to nearby health facility: This was measured by using the report of households on the walking hours to reach the nearest healthcare facility. A 5 km cut-off was used which is roughly equivalent to a walking distance of 1 hour, which is a standard cut off in rural areas(44).

5.9 Data management and analysis

The raw data was cleaned, coded and first entered into Epi Data version 4.6 to minimize error and was exported to SPSS version 23.0 for further analysis. Descriptive statistics such as frequencies, means, medians and percentages was calculated. Bivariable logistic regression analysis was carried out to assess the association of each independent variable with household satisfaction to CBHI scheme. Variables with a p-value of less than 0.2 at CI 95% in the bivariable analysis were included in the multivariable logistic regression analysis.

Multivariable logistic regression model was fitted to control confounders and to get the independent predictors of household satisfaction to CBHI scheme. Variables with p-values <0.05 at 95% CI at the multivariable analysis was considered as significantly associated with CBHI scheme satisfaction. The Hosmer & Lemeshow goodness of fit test was checked for

insignificance ($p > 0.05$) to indicate that the model is adequate. Presence of multi co-linearity was checked using variance inflation factor (VIF) and correlation coefficient.

5.10 Ethical considerations

Ethical approval was obtained from the Institutional Review Board (IRB) of Bahir Dar University College of Medicine and Health Sciences (BDU CMHS). Verbal consent was obtained from the households after informing them all the purpose, benefit, confidentiality of the information and the voluntary nature of participation in the study. Households were assured that refusal to participate did not affect their membership and service utilization in the CBHI scheme.

6. RESULT

6.1 Socio-demographic characteristics of study participants

Six hundred four heads of household were participated in this study with a response rate of 95.9%. Of these study participants, 91.2% (n=551) were male and the median age of participants was 39 years old (minimum =25; maximum =88). 87.4% (n=528) of respondents were married. The median family size was five members (minimum=1; maximum=9). 58.3% (n=352) of participants have no formal education. Nearly 80% (n=481) of the participants were rural residents, 82.1% (n=496) were farmers in occupation and in regard to the wealth index, 36.6% (n=221) of households were in the rich category.

Table 2: Socio-demographic characteristics of the participants enrolled in CBHI scheme in Bibugn district, East Gojjam zone, Northwest Ethiopia, 2021.

Variables	Category	Frequency	%
Household head's age (median age=39)	≤39	310	51.3
	>39	294	48.7
Sex	Male	551	91.2
	Female	53	8.8
Marital status	Married	528	87.4
	Unmarried	76	12.6
Family size	≤5	315	52.2
	>5	289	47.8
Level of education	No formal education	352	58.3
	1-8	168	27.8
	9 and above	84	13.9
Occupation	Farmer	496	82.1
	Merchant	80	13.2
	Others	28	4.6
Residence	Rural	481	79.6

	Urban	123	20.4
Wealth index	Poor	197	32.6
	Medium	186	30.8
	Rich	221	36.6

6.2 Experience of households in CBHI scheme

Around three fifth of the households (60.1%) had a four years length of enrollment. Over half (54.6%) of the respondents had a history of visit at both health centers and hospitals, and only a small proportion of participants (4.6%) visited hospitals only. More than three fourth of the study participants (76 %) visited health care facilities more than five times since enrolled in the CBHI scheme. 89.9 % of the participants reported that they had history of participation in CBHI related meetings and 90.6 % of the participants were paying members.

Table 3: Experience of households with CBHI Scheme in Bibugn District, East Gojjam Zone, Northwest Ethiopia, 2021

Variable	Category	Frequency	%
Length of household enrollment	1 year	49	8.1
	2 years	81	13.4
	3 years	111	18.4
	4 years	363	60.1
health institution visited	health center only	246	40.7
	hospital only	27	4.5
	Both	331	54.8
Frequency of health facility visit	≤5 times	145	24.0
	>5 times	459	76.0
Participated in CBHI related meetings	Yes	543	89.9
	No	61	10.1
Type of membership	Paying member	547	90.6
	Indigent member	57	9.4

6.3 Household's knowledge on CBHI benefit packages

To measure the household's knowledge of the CBHI benefit packages, eight items were used and from the total of eight items, participants scored a minimum of two and a maximum of eight with a median score of seven, and households were labeled as having good knowledge

if they answered more than or equal to the median score; otherwise, they were labeled as having poor knowledge. Thus, 49.3% (n=298) of the participants answered less than seven of CBHI benefit package questions and labeled as having poor knowledge of the CBHI benefit packages.

Table 4: knowledge of participants on CBHI benefit packages in CBHI enrollees of Bibugn District, East Gojjam zone, Northwest Ethiopia, 2021

Variables		**Frequency**	**%**
CBHI is good way of helping clients to relieve health expenditure	Yes	508	84.1
	No	96	15.9
CBHI covers only care with in the country(Ethiopia)	Yes	434	71.9
	No	170	28.1
CBHI covers only care from public health institutions	Yes	419	69.4
	No	185	30.6
CBHI does not cover transportation fee	Yes	559	92.5
	No	45	7.5
CBHI covers inpatient care	Yes	496	82.1
	No	108	17.9
CBHI covers outpatient care	Yes	582	96.4
	No	22	3.6
CBHI does not cover medical care for cosmetic values	Yes	365	60.4
	No	239	39.6
CBHI does not cover kidney dialysis	Yes	377	62.4
	No	227	37.6

6.4 Health service provision related factors

Around one fourth (25.7%) of the participants reside in a >5km distance from health care facilities. 88.2% (n=533) of the participants reported that they received and agreed with laboratory services during their last visit to health facilities. On the other hand, 72.7% (n=439) of the participants reported that they got and agree with the prescribed drugs. About 61.2% (n=418) of the participants agreed that they got immediate care when visiting health facilities. However, around three out of five of the participants (60.4%) reported that they didn't get respect from the health care providers during their visit in healthcare facilities.

Table 5: Health service provision related characteristics of households in CBHI scheme in Bibun district, East Gojjam zone, Northwest Ethiopia, 2021

Variables	Category	Frequency	Percent
Distance to health facility	≤5km	499	74.3
	>5km	155	25.77
Agreement with laboratory services	Yes	533	88.2
	No	71	11.8
Agreement with prescribed drugs	Yes	439	72.7
	No	165	27.3
Got immediate care	Yes	418	69.2
	No	186	30.8
Friendliness/respect from healthcare providers	Yes	239	39.6
	No	365	60.4

6.5 Level of households satisfaction with the CBHI scheme

Household satisfaction with CBHI scheme was measured using ten items each having a five point Likert scale from strongly disagree to strongly agree. Internal consistency of the ten items was checked by using cronbach's alpha and was found 0.947. The points obtained from the ten items by each respondent were computed to get the total score of each respondent and respondents scored a minimum of 20 and a maximum of 50 points with a median score of 37.00. Thus, households who score ≥37.00 were labeled as satisfied and those who scored <37.00 were labeled as not satisfied. Accordingly, 56.1% (n=339) of the respondents scored ≥ to the median satisfaction score and labeled as satisfied whereas the remaining 43.9% (n=255) scored below the median satisfaction score and labeled as not satisfied.

Table 6: Result of ten variables measuring satisfaction by using a 5 point likert scale in households of Bibun district, East Gojjam zone, Northwest Ethiopia, 2021

Variable	Strongly disaree	disaree	Neutral	Agree	Stronly agree
Satisfied with the opening hours/working hours of the CBHI	1(0.2%)	46(7.6%)	84(13.9%)	297(49.2%)	176(29.1%)
Satisfied with collection process of insurance cards	1(0.2%)	57(9.4%)	132(21.9%)	257(42.5%)	157(26%)
Satisfied with the time to make use of the CBHI program after payment of registration fee	31(5.1%)	160(26.5%)	169(28%)	159(26.3%)	85(14.1%)
Satisfied with the schedule for paying of premium	1(0.2%)	39(6.5%)	114(18.9%)	257(42.5%)	193(32%)
Local CBHI management is trust worthy	5(0.8%)	58(9.6%)	142(23.5%)	239(39.6%)	160(26.5%)
Satisfied with permitted health institutions (satisfied with line of referral)	75(12.4%)	184(30.5%)	143(23.7%)	108(17.9%)	94(15.6%)
Satisfied with the information provided about CBHI	1(0.2%)	66(10.9%)	109(18%)	255(42.2%)	173(28.6%)
Satisfied with CBHI benefit packages	2(0.3%)	56(9.3%)	133(22%)	240(39.7%)	173(28.6%)
Want to stay enrolled in the CBHI scheme	0(0%)	75(12.4%)	69(11.4%)	273(45.2%)	187(31%)
Recommend others to be a member of CBHI	3(0.5%)	63(10.4%)	175(29%)	203(33.6%)	160(26.5%)

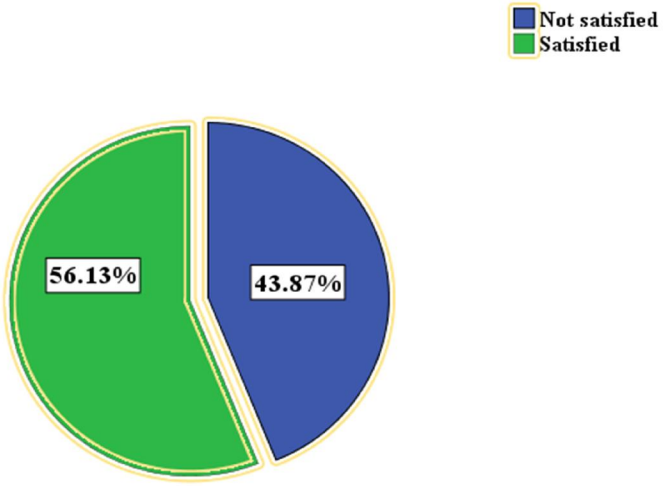

Figure 3: Satisfaction with CBHI scheme in households of Bibugn district, East Gojjam zone, Northwest Ethiopia, 2021

6.6 Bivariable and multivariable regression analysis

Bivariable binary logistic regression analysis shows that socio-demographic factors like age, educational status, family size, residence and occupation, CBHI scheme experience factors like length of enrolment, type of health institution visited and frequency of health institution visit, health care service related factors like distance to healthcare facility, got and agree with laboratory services, got and agree with prescribe drugs, immediate care provision and respect/friendliness of healthcare service providers, and knowledge on CBHI benefit packages were found significantly associated with household satisfaction with CBHI scheme all at $p<0.05$, 95% C.I.

However, by assuming there may be confounders present and in order to control them, variables having a p-value of <0.2 were included in the multivariable model. Thus, the variables sex, wealth index, participation in CBHI related meeting and type of membership were excluded from the multivariable model since their p-value exceeds 0.2, 95% C.I at bivariable analysis.

In the multivariable level of analysis Hosmer and Lemeshow test of model fitness was checked and found insignificant ($p=0.292$). Multi co-linearity was also checked by using correlation coefficient and VIF. For instance, variables residence and occupation were found linearly associated with a correlation coefficient of 0.91 and VIF > 5; so that; the variable occupation was removed from the model.

When confounders were controlled and multi co-linearity was managed; the factors age, residence, type of health institution visited, distance to health facility, getting prescribed

drugs and agreement with it, friendliness of healthcare providers and knowledge of CBHI benefit packages were found statistically significant independent predictors of satisfaction at $p<0.05$, 95% C.I. For instance, the odds of household heads satisfaction were 85% higher for elder enrollees (>39 years) than younger enrollees (≤39 years) [AOR=1.85; 95% CI= 1.17–2.94]. Rural residents were 4.1 more likely to be satisfied with CBHI scheme than urban residents [AOR=4.13; 95% CI= 2.24–7.62].

On the other hand, the likelihood of households satisfaction to CBHI scheme was nearly 66% less for those households who visit health centers only when compared with those who visit both hospitals and health centers [AOR=0.34; 95% CI 0.20–0.55]. Households who walk ≤5 km distance to reach health facilities were 3.1 more likely to satisfy by CBHI scheme than those households who are >5 km far from health care facilities [AOR=3.18, 95% C.I= 1.82-5.55].

Similarly, the odds of household heads satisfaction was 2.3 and 3.6 times higher for those enrollees who got and agreed with prescribed drugs and for those who agreed with respect/friendliness of healthcare service providers when compared to those enrollees who disagreed on these health care services related factors, [AOR=2.31; 95% CI 1.36-3.92] and [AOR=3.65; 95% CI 2.18–6.10] respectively. Moreover, participants who had good knowledge of CBHI benefit packages were three times more likely satisfied with CBHI scheme than those who have poor knowledge [AOR =3.00, 95% CI = 1.93–4.67].

Table 7: Result of bivariable and multivariable logistic regression analysis on factors associated with overall satisfaction on CBHI scheme in households of Bibugn district, East Gojjam zone, Northwest Ethiopia, 2021

Variables	HH satisfaction with CBHI		COR(95% C.I)	AOR(95% C.I)	P-value
	Satisfied	**Not satisfied**			
Age of household head					
≤39	129	181	1	1	
>39	210	84	3.50(2.49-4.92)	1.85(1.17-2.94)	0.009*
Marital status					
Married	284	244	0.44(0.26-0.75)	0.63(0.31-1.29)	0.209
Not in marriage	55	21	1	1	
Family size					
≤5	153	162	1	1	
>5	186	103	1.91(1.37-2.65)	1.39(0.87-2.23)	0.160
Educational status					0.242
No formal education	210	142	2.17(1.33-3.53)	1.74(0.86-3.51)	0.122
1-8	95	73	1.91(1.12-3.25)	1.28(0.63-2.61)	0.484
9 and above	34	50	1	1	
Residence					
Rural	289	192	2.19(1.46-3.29)	4.13(2.24-7.62)	0.000*
Urban	50	73	1	1	
Length of enrolment					0.274
1 year	14	35	1	1	
2 years	34	47	1.80(0.84-3.87)	2.23(0.78-6.36)	0.133
3 years	56	55	2.54(1.23-5.24)	2.29(0.84-6.20)	0.102
4 years	235	128	4.59(2.38-8.84)	2.49(1.00-6.20)	0.049
Health facility visited					0.000*
Health center only	76	170	0.16(0.11-0.23)	0.34(0.20-0.55)	0.000
Hospital only	20	7	1.03(0.42-2.53)	1.15(0.37-3.60)	0.799
Both	243	88	1	1	
Frequency of health facility visit					

≤5 times	56	89	1	1	
>5 times	283	176	2.55(1.74-3.75)	1.15(0.67-1.96)	0.598
Distance to health facility					
≤5 km	289	160	3.79(2.57-5.59)	3.18(1.82-5.55)	0.000*
>5 km	50	105	1	1	
Agreement with laboratory service					
Yes	312	221	2.30(1.38-3.82)	0.87(0.44- 1.73)	0.711
No	27	44	1	1	
Agreement with prescribed drug					
Yes	292	147	4.98(3.37-7.38)	2.31(1.36-3.92)	0.002*
No	47	118	1	1	
Got immediate care					
Yes	255	163	2.12(1.49-3.00)	0.96(0.58-1.58)	0.889
No	84	102	1	1	
Agreed with friendliness/respect of health care providers					
Yes	191	48	5.83(3.99-8.52)	3.65(2.18-6.10)	0.000*
No	148	217	1	1	
Knowledge of CBHI benefit packages					
Poor knowledge	117	181	1	1	
Good knowledge	222	84	4.08(2.90-5.75)	3.00(1.93-4.67)	0.000*

1- Reference category

*- significant at $p<0.05$

7. DISCUSSION

In this study, the level of satisfaction with CBHI scheme in households of Bibugn district was found to be 56.1% [95% C.I = 52.2%-59.9%]. This result is in line with studies conducted in Anilemo District (Hadiya Zone, Southern Ethiopia); 54.1%(16), Sheko district (Benchi-Maji zone, Southwest Ethiopia); 54.7%(18), Nigeria; 58.1%(32) and Turkey; 53.3%(30). However, the finding of this study is higher in comparison to studies conducted in FHCSH, Bahir Dar, Ethiopia; 50.2%(33), Ghana; 46.9%(31) and Nigeria; 42.1%(19). This difference may probably be because of difference in study settings, since the former studies were facility based. In addition, difference in socio-demographic characteristics of the respondents may also be the reason for the observed difference. For instance, only females were participants for the study in FHCSH, Bahirs Dar, Ethiopia. Furthermore, variations in study duration and difference in contribution payment may also be the cause for the observed difference.

On the other hand, the finding of this study is lower than earlier studies conducted in Damotwoyde district (Wolaita zone, SNNRS of Ethiopia); 91.38%(17) and Bangaldish; 83.4%(29). The difference in definition of satisfaction may possibly be the reason for the difference from these results because satisfaction score was calculated based on percentage of maximum scale in both of the former studies.

In this study, younger participants with age ≤39 years were less likely satisfied with CBHI scheme than older participants with age>39 years. The finding of this study is supported by previous studies conducted in Ethiopia(16, 17), Nigeria(19), and Turkey(30). The possible reason behind this is that, frequency of getting illness increases as age increases which will in turn increases the frequency of health care service utilization. For instance, as per our data, 82% of older participants visited health facilities more than five times, whereas lesser proportion of younger participants (70%) had experience of a more than five times health facility visit. In addition to this, a supporting evidence from a recent study in Ethiopia showed that older age is associated with decrease in dropout from CBHI scheme(45).

Our study shows that urban residency was found negatively associated with CBHI scheme satisfaction. This is similar with a study conducted in Burkina Faso(15). This might be due to the reason that urban residents may have higher expectation on health care service quality and they may not get their expectation fulfilled during their visit to health care facilities, and they may prefer using private health facilities than rural residents.

Contrary to the finding of this study, urban residency was associated with households satisfaction in insurance scheme in a study done in Istanbul; Turkey(30). The possible reason for this difference may be difference in sample size and residence composition of

participants. The former study was conducted relatively on a small sample size (n=345) and 70% of the participants were urban residents, while in our study, majority (79.6%) of the participants were rural residents. Moreover, the high non-response rate (11.1%) in the former study may also be a possible reason for the observed difference since non-response bias may present in the former study.

In this study, we observed that there is a significant association between type of health facility visited and satisfaction to CBHI scheme. Study participants who visited only health centers were less satisfied compared to households who visited either hospitals only or both hospitals and health centers. This is in line with a previous study finding in Ethiopia(18) and Nigeria(19). This may be attributed with the fact that hospitals are staffed with better providers (doctors and experienced professionals) and more equipped with better facilities, so that, households may expect a better level of care from hospitals than health centers. But, this fact clashes with the CBHI scheme regulation of mandatory referral procedure that requires members to visit health centers before they are referred to hospitals (district or regional) and those who do not follow this referral procedure their costs of medical treatment will not be covered totally(27). This finding can be evidenced by a study finding in India; which reported that, client satisfaction to health insurance was associated with availability of doctors(35). In addition, a recent report by Eseta et.al showed that inaccessibility of hospitals is associated with dropout from CBHI scheme(45).

Distance to health facilities is also found as a significant predictor of household's satisfaction with CBHI scheme. Those participants who walk less than 5 km to reach at health care facilities were more satisfied with the scheme than their counterparts. This might be due to the reason that nearby enrollees can frequently utilize health care services for every illness without payment but distant households may not, due to distance barrier. This can be supported by our data that shows higher proportion of households who reside in $\leq$ 5 km distance (79%) have more than five times frequency of health facility visit when compared with those who are in >5 km distance(65.8%). This result can also be supported by a study finding by Atinafu DD et.al and a meta-analysis by Dror DM et.al that reported travel time to the nearest health institution is a predictor of enrolment in CBHI scheme(38, 40). In addition, distance to healthcare facility is also reported to be associated with dropout from CBHI scheme(39).

Beside this, friendliness or getting respect from health care providers was another health care service related factor that has significant association with satisfaction of households with CBHI scheme. This finding is in line with previous studies conducted in Ethiopia(17) and

Ghana(31, 36). This might be linked with the presence of gap in implementation of compassionate, respectful and caring (CRC) practice in healthcare services. Evidences show that implementation of CRC increases patient satisfaction. Whereas, a recent study finding by Edmealem et.al in Northeast Ethiopia shows the implementation of CRC healthcare services by health care providers based on patient's perspective was found to be low(46). In addition, a study from rural tropical Ecuador reported availability of dedicated and friendly staff was closely associated with low healthcare utilization which could be an obstacle to successful implementation of a CBHI scheme(47).

This study also shows that getting prescribed drugs and agreement with it was also a significant predictor of satisfaction in CBHI beneficiaries. Those who got and agreed were more likely satisfied than those who did not. This finding is consistent with previous studies conducted in Ethiopia(16) and Bangladesh(29). This might imply two things. The first one is the perception of CBHI users on the quality of health care providers may be poor. The second one is poor communication or counseling of health care providers to their patients which again goes to the implication of poor practice of CRC/patient centered care.

Moreover, our study also shows that, knowledge about CBHI benefit packages is associated with household's satisfaction with CBHI scheme. Those participants who have a good knowledge about CBHI benefit packages were more likely satisfied than participants having poor knowledge. This result is similar with previous study findings in Ethiopia(16, 18) and Nigeria(19). This may be linked with that enrollee's satisfaction gets better only if they know rules and regulations or rights and obligations including benefits offered by the scheme, and when they act accordingly. This can be supported by previous studies conducted in Ethiopia, Sudan and Senegal that showed enrollee's poor knowledge of the health insurance benefit packages is often associated with dropout (39, 48-50). In addition, knowledge and understanding of CBHI is also reported to be an enabler of enrolment(38).

8. STRENGTHS AND LIMITATIONS OF THE STUDY

This study was community based study and has relatively large sample size. Beside this, the study has also its own limitations. Firstly, the study might have a recall bias especially on health care service related and scheme experience factors since a time gap may present between receiving healthcare services and data collection period. In addition, the study was only a quantitative study and other important variables that may affect households' CBHI scheme satisfaction may have been explored if a mixed quantitative and qualitative method was used.

9. CONCLUSION

This study showed that the overall satisfaction of households in Bibugn district with the CBHI scheme was good. Old age, rural residence, hospital visit, nearby distance to health facilities, friendliness of healthcare providers, agreement with prescribed drugs, and having good knowledge of CBHI benefit packages were found significantly associated with households' CBHI scheme satisfaction.

10. RECOMMENDATIONS

It is understood that satisfaction with CBHI scheme decrease dropout from scheme and increases entrance of new enrollees to the scheme. So, to further enhance enrollee's satisfaction and make the CBHI scheme sustainable, consideration should be given for increasing geographical accessibility of health care facilities, improving practice of CRC, improving quality of health care providers and improving enrollee's knowledge of CBHI benefit packages. Therefore, the following recommendations are forwarded to the concerned bodies that may help to increase the household's satisfaction with CBHI scheme:

To Amhara Regional State Health Bureau

- Geographical inaccessibility of healthcare services is still an issue and it is better design strategies and to work more to decrease walking distance to access healthcare services
- It may also be better to staff health centers with better providers (doctors and experienced professionals) and equip with better infrastructures.
- Moreover, it might also be better to have a strategy like trainings to improve practice of CRC healthcare practices in health facilities.

To Bibugn woreda health office

- It is better to communicate with Regional Health Bureau and NGOs, and try to address geographical accessibility of healthcare services.
- Better to have an evaluation strategy for the CRC/patient centered practice in healthcare facilities

To Bibugn district CBHI office

- Better to design strategies required to improve enrollee's knowledge of CBHI benefit packages like education, information campaign, and strengthening community participation in the district.

To researchers

- Better if further study will be conducted by using other study designs like mixed qualitative and quantitative study design.

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12. ANNEX

Annex 1: Information and informed consent form
Interviewer: Name_____ Father's name_____

Respondent's code number_____

A. Information sheet:

Good morning/afternoon/evening dear respondent, I am _____who is the data collector for a research to be conducted by Yasab Leykun, a Master's student at Bahir Dar University, College of Medicine and Health Sciences, Department of Health System Management and Health Economics. Today, I am here to collect information on "*assessment of level of satisfaction with Community Based Health Insurance and associated factors among households in Bibugn district, Northwest Ethiopia''*. If you take part in the study it would not took us more than 30 minutes. I would like to assure you that everything from your information and records would be completely confidential to the research and the data are stored without your name and only used for the purpose of this study. None of this would affect the service you receive from the insurance scheme and have not any extra incentives, but will help in future planning for the health insurance scheme. No identifying names or characteristics will go into my report, so you may share your thoughts openly.

Additionally, taking part in this study is completely voluntary. It is your choice whether to participate or not. You may skip any questions that you do not want to answer. Please ask me to stop as we go through the information and I will take time to explain. The results of the study will hopefully serve as an important input for policy and intervention programs that aim at addressing CBHI household's satisfaction and associated factors. Do you have any questions that you need to be clarified more? If you have any question you can contact the principal investigator at any time convenient for you using the following address:

Cell phone: 0912951583; E-mail: yasmagnaw1@gmail.com

Interview: _____date_____month_____year.

B. Informed consent sheet

I have been briefly informed about the study and I clearly understood the objective. Since it doesn't affect my personal life and have no any incentives, I agreed to take part in the study. Consequently, I here approve my consent to take part in the study as an interviewee with my signature.

Agreed to participate_____ sign and proceed to interview

Not agreed to participate_____ thank the respondent and end the interview

Signature _____ Date _____

Dear Participants! First of all I would like to say thank you for your collaboration.

This questionnaire is prepared to collect data for thesis purpose for the fulfillment of Master's Degree in Health system management and health economics entitled as assessment of level of household satisfaction with community based health insurance in Bibugn district, Northwest, Ethiopia. All the data which is collected from you based on the following questions are for academic purpose only that keeps in secret and will not transfer for another person or organization. Since your participation in this study has a vital significant to achieve the objective of the study and to accomplish successfully try to fill the questionnaire properly. **Don't provide your name.**

General Information

Enumerator full name: _____ Signature _____Date _____

Title: Assessment of level of satisfaction and associated factors of CBHI users among households in Bibugn district, East gojjam zone, Northwest Ethiopia, 2021.

Respondents Code No……

Date of interview ____Time started ____Time finished____

የመረጃና የፈቃደኝነት ቅጽ

የመረጃ ሰብሳቢው ስም_____ የአባት ስም_____

የተጥያቄው መለያ ቁጥር_____

ሀ. የጥናቱ መረጃ ቅጽ፡-

ጤና ይስጥልኝ፤ እንደምን አደሩ/እንደምን ዋሉ/እንደምን አመሹ (እንደአስፈሊጊነቱ በመረጃ ሰብሳቢው)፡፡ ስሜ_____ ይባላል፡፡ የመጣሁት በባሕርዳር ዩኒቨርሰሲቲ የሁለተኛ ዲግሪ ተማሪ በሆነው ያሳብ ለይኩን የማህበረሰብ አቀፍ ጤና መድህን ተጠቃሚዎችን እርካታና ቁርኝት ያላቸው ችግሮች በቢቡኝ ወረዳ በሚል በሚያደርገው ጥናት ዙሪያ መረጃ ለመሰብሰብ ነው፡፡ ይህንንም ለማድረግ ከእኔ ጋር ከ30 ደቂቃ በላይ አንቆይም፡፡ እርስዎ የሚሰጡኝ መረጃ ከላይ ለተጠቀሰው የጥናት ዓላማ ብቻ የሚውል ሲሆን መረጃዎት በሙሉ ስምዎት ሳይጠቀስ በምሥጢር የሚጠበቅ መሆኑን አረጋግጥልዎታለሁ፡፡ በዚህ ጥናት በመሳተፍዎ በጤና መድኑ በሚያገኙት አገልግሎት ላይ ምንም ዓይነት ተጽንኦ አይፈጠርብዎትም፡፡ እርስዎም ምንም ዓይነት ቀጥተኛ የሆነ ጥቅማጥቅም የማያገኙ ቢሆንም ከዚህ ጥናት የሚገኘዉ ውጤት በቀጥታ ማህበረሰቡን የሚጠቅም ነው፡፡ በጥናቱ ስምዎት ስለማይጠቀስ በመጠይቁ መሠረት ነጻ ሆነው ሀሳብዎትን መግለጽ ይችላሉ፡፡ ከዚህ በተጨማሪ በጥናቱ ለመሳተፍም ሆነ ላለመሳተፍ የእርስዎት ሙሉ ፈቃደኝነት ላይ የተመሠረተ ነው፡፡ መመለስ የማይፈልጉት ጥያቄ ካለ ማለፍ የሚችሉ ሲሆን ግልጽ ያልሆነልዎትና ያልገባዎት ጥያቄ ካለ ደግሞ እኔን በማስቆምና በመጠየቅ ጊዜ ወስጀ ላብራራልዎት እችላለሁ፡፡ ይህ መረጃ ትንሽ ጊዜዎትን የሚይዝ ቢሆንም መላውን የህብረተሰብ ጤናመድህን ተገልጋዮች ሊጠቅም የሚችል የአገልግሎት ጥራት ማሻሻያ ለማድረግ የሚያግዝ በመሆኑ እንዲተባበሩኝ እጠይቅዎታለሁ፡፡

የተወሰኑ ጥያቄዎች ባነጋግርዎ ፈቃደኛ ነዎት?

ፈቃደኛ ነኝ_____

ፈቃደኛ አይደለሁም _____ አመሰግናለሁ!

በጥናቱ ዙሪያ ማንኛውም ጥያቄ ካለዎት አጥኝውን በ0912951583 ማግኘት ይችላሉ፡፡

መጠይቁ የተከናወነበት፡ ----------ቀን --------- ወር ---------- ዓ.ም

ለ. የፈቃደኝነት ማረጋገጫ ቅጽ

የጥናቱ ዓላማ በግልጽ ተብራርቶልኛል፣ በሚገባም ተረድቸዋለሁ፡፡ ጥናቱ በግል ሕይዎቴ ላይ ምንም አደጋ የማያስከትል መሆኑን እና በማደርገው ተሳትፎ ክፍያ አለመኖሩንም አውቄአለው፡፡ ስለዚህ በዚህ የጥናት ሥራ ላይ ለመሳተፍ ፈቃደኛ መሆኔን በፊርማዬ አረጋግጣለሁ፡፡

ፊርማ ----------

ቀን ----------

ውድ ተሳታፊየ በቅድሚያ ስለትብብርዎ አመሰግናለሁ!! ይህ መጠይቅ የተዘጋጀው በጤና ስርአት እና ጤና ኢኮኖሚክስ ትምህርት ክፍል "የማህበረሰብአቀፍ ጤናመድህን ተጠቃሚዎች እርካታና ቁርኝነት ያላቸው ችግሮች በቢቡኝ ወረዳ" በሚል ርእስ ለሁለተኛ ዲግሪ ማሟያ ለሚካሄዳው ጥናት መረጃ ለመሰብሰብ ነው፡፡ በመጠይቁ መሰረት ከእረስዎ የሚሰበሰበው መረጃ ለትምህርት ዓላማ ብቻ የሚውልና መረጃውም በምሥጢር የሚያዝና ለሌላ አካል ወይም ድርጅት የማይተላለፍ ነው፡፡ እርስዎ በዚህ ጥናት ላይ የሚያደርጉት ተሳትፎ ለጥናቱ መሳካትና ዓላማውን ከግብ ለማድረስ ከፍተኛ ጠቀሚታ ያለው በመሆኑ መጠይቆቹን በአግባቡ እንዲሞሉልኝ/አግባብነት ያለው መልስ እንዲሰጡኝ/ እጠይቃለሁ፡፡ ስምዎትን መጻፍ አያስፈልግም፡፡

አጠቃላይ መረጃ መጠይቁን የሞላው ሙሉ ስም: _____ ፊርማ _____

ቀን_____

የተጀመረበት ሰዓት---------- የተጠናቀቀበት ሰዓት ----------

የመጠይቁ መለያ ቁጥር ----------

Annex 2: Questionnaire

A. English version

Number	**Section1: Socio- demographic characteristics**		
	Questions	Options	Skip
1.	Age	_____years	
2.	Sex	1. Male 2. Female	
3.	Marital status	1. Married 2. Not in marriage(single/divorced/widowed)	
4.	Number of family members in the household	_____numbers	
5.	Religion	1. Orthodox 2. Muslim 3. Protestant 4. Others(specify)_____	
6.	Educational status	1. Not able to read and write 2. Able to read & write but not have formal education 3. Grade 1–8 4. Grade 9 and above	
7.	Residence of household	1. Urban 2. Rural	
8.	Households occupation	1. Farmer 2. Merchant 3. Others	
9. Wealth index			
9.1	Does the Household have farm land?	1.Yes; Size in hectares_____ 2.No	
9.2	Do the household have any annual income earned	1. Teff; 1. Yes (in quintal) _____ 0. No 2. Maize; (1. Yes (in quintal) _____0. No	

	as a result of sales of:	3. Wheat (1. Yes (in quintal) _____0. No 4. Barley (1. Yes (in quintal) _____0. No 5. Potato (1. Yes (in quintal) _____0. No 6. Khat; 1. Yes (in Kg) _____ 0. No 7. Grains; 1. Yes (in quintal) _____0. No 8. Fruit; 1. Yes (in Kg) _____ 0. No 9. Other specify (in quintal)____	
9.3	Does this household own any livestock, herds, other farm animals, or poultry?	1. Yes 2. No……skip to 9.5	
9.4	How many of the following animals do this household own?	1. Milk cows, oxen or bulls?_____ 2. Other cattle? _____ 3. Hoarse/Mules/Donkey? _____ 4. Goats _____ 5. Sheep _____ 6. Chickens and other poultry _____ 7. Beehives	
9.5	Does your household have	Yes No 1. A Radio/tape 1 2 2. A Television 1 2 3. A Refrigerator 1 2 4. A Bed with cotton/ sponge/spring matters 1 2	
9.6	Does any member of this household own?	Yes No 1. A Mobile phone 1 2 2. A bicycle 1 2 3. A Motorcycle 1 2 4. A Animal draw cart 1 2 5. A Car/Truck 1 2 6. A Bajaje 1 2	
9.7	What is the type of floor of the house?	1-natural(earth/sand) 2-cement 3-ceramic	

9.8	What is the type of roof of the house?	1. Thatch roof 2. Corrugated sheet 3. Other (specify)_____	
9.9	What is the wall of your residence house made of	1. Wood with Mud 2. Concrete 3. Other (specify)_____	
9.10	How many bed rooms do you have in the household?	--------rooms	
9.11	Do you have separate rooms for cattle?	1. Yes 0. No	
9.12	Do you have separate room which is used as a kitchen?	1. Yes 0. No	
9.13	Does the household have electricity?	1. Yes 0. No	
9.14	What is the type of fuel for cooking?	1. Wood 2. Charcoal 3. Biogas 4. Kerosene 5. Electricity	
9.15	What kind of latrine does your family have?	1. None 2.Traditional latrine 3.VIP 4.Other (specify)_____	
9.16	What is source of water for this household use?	1. River 2. Spring 3. Hand well 4. pipe water	
Section 2: Experience with CBHI			
10.	Length of household enrollment	_____years	
11.	Which health institution did you visit starting from enrolment?	1. Health center 2. Hospital 3. Both	
12.	How many times did you visit?	1. Only once 2. 2-5 times 3. >5 times	
13.	Have you ever participated CBHI related meetings?	1. Yes 2. No	

14.	Type of membership	1 Paying members 2 Indigent members	
Section 3: Knowledge on CBHI package			
15. CBHI is good way of helping clients to relieve health expenditure		1. No 2. Yes	
16. CBHI covers only care from public health institutions		1. No 2. Yes	
17. CBHI covers only care with in the country(Ethiopia)		1. No 2. Yes	
18. CBHI does not cover transportation fee		1. No 2. Yes	
19. CBHI covers inpatient care		1. No 2. Yes	
20. CBHI covers outpatient care		1. No 2. Yes	
21. CBHI does not cover medical care for cosmetic values		1. No 2. Yes	
22. CBHI does not cover kidney dialysis		0. No 1. Yes	
Section 4: Health services provision related questions			
23.	Distance to the nearest health facility that households can use with their CBHI cards	_____hour	
24.	During the recent visit to the health care institutions, did the sick family members receive laboratory services	1. Yes 2. No	If No skip to 26
25.	During the recent visit to the health care institution, do you agree that the sick family member received the required laboratory services?	1. Yes 2. No	
26.	During the recent visit to the health care institution, did the sick family members receive drugs?	1. Yes 2. No	If No skip to 28

27.	During the recent visit to the health care institution, do you agree that the sick family members received the correct prescribed drug?	1. Yes 2. No	
28.	Household members got immediate care(short waiting time) when visiting health facility	1. Yes 2. No	
29.	Health care service providers were friendly/give respect to household members	1. Yes 2. No	
Section 5: Questions related to satisfaction with CBHI			
No	Questions	Options	
30.	Household members are satisfied with the opening hours/working hours of the CBHI	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
31.	Household members are satisfied with the collection process of insurance cards	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
32.	Household members are satisfied with the time to make use of the CBHI program after payment of registration fee	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
33.	Household members are satisfied with the schedule for paying of premium	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
34.	Local CBHI management is trust worthy	1. Strongly disagree 2. Disagree 3. Neutral	

		4. Agree 5. Strongly agree	
35.	Households are satisfied with permitted health institution (According to the CBHI regulation CBHI users are required to visit first public health centers within the district/zone and follow line of referral)	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
36.	Household members are satisfied with the information provided about CBHI.	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
37.	Household members satisfied with CBHI benefit packages	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
38.	Household members want to stay enrolled in the CBHI scheme	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	
39.	Recommend others to be a member of CBHI	1. Strongly disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly agree	

B. Amharic version

ቀበሌ:_____ የተሳታፊ ቁጥር(ኮድ)_____

ተ.ቁ	ጥያቄዎች	መልሶች	ኮድ	ይለፉት
ክፍል ፡ አጠቃላይ መረጃ				
፡.	የአባወራ/ የእማወራ እድሜ	----------ዓመት		
2.	ፆታ	፡-ወንድ 2-ሴት	፡ 2	
3.	የአሁን ወቅት የጋብቻ ሁኔታ	፡-ያገባ/ባለ ትዳር 2-ከጋብቻ ዉጭ/(ያላገባ/ች፣የፈታ/ች፣ቧሏየሞተባት/ሚስቱ የሞተችበት)	፡ 2	
4.	የቤተሰብ ብዛት	----------በቁጥር		
5.	ሀይማኖት	፡. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ሌላ(ይገለጽ)-------	፡ 2 3 4	
6.	የአባወራው/ የእማወራው የትምርት ደረጃ	1. ማንበብ ና መጻፍ የማይችል 2. ማንበብ ና መጻፍ የሚችል ግን መደበኛ ት/ት ያልተማረ 3. ከ ፡-8 የተማረ 4. ከ 9 እና በላይ የተማረ	፡ 2 3 4	
7.	የሚኖሩበት ቦታ	፡-ገጠር 2- ከተማ	፡ 2	
8.	ስራ	፡-አርሶ አደር 2-ነጋዴ	፡ 2	
9.	የሀብት መጠን ልኬት			
9.፡	ቤተሰቡ የእርሻ ቦታ አላቸው	፡.አወ ፡ምን ያክል ሄክታር-------- 2.የለንም		
9.2	ቤተሰቡ ከሚከተሉት ሰብሎች የምታገኙት አመታዊ ገቢ አለ	፡. አዎ 2. የለም ፡. ጤፍ በኩንታል---- 2. በቆሎ በኩንታል---- 3. ስንዴ በኩንታል---- 4. ገብስ በኩንታል----- 5. ድንች በኩንታል------ 6.ጫት በኪ.ግ------ 7.ጥራጥሬ በኩንታል------		

		8.ፍራፍሬ በኪ.ግ------ 99. ሌላ ካለ ይገለፅ
9.3	በቤታችሁ ውስጥ ከብቶች, መንጋዎች, ሌሎች የእርሻ እንስሳት ወይም የደሮ እርባታ አሏችሁ?	1. አዎ 2. የለም.....ወደ ጥያቄ ቁጥር 9.5
9.4	ለጥያቄቁጥር 10.3 መልስዎ አዎ ከሆነ ከሚከተሉት ውስጥ ምን ያህሉ የቤት እንስሳዎች አሏችሁ? • ከሌለ '0' ብለውይመዘግቡ	1. የወተትላም, በሬ 2. ሌሎች ከብቶች (ወይፈን/ጊደር/ጥጃ) 3. ፈረስ/በቅሎ/አህያ 4. ፍየሎች 5. በጎች 6. ዶሮዎች/የእንቁላል ዶሮዎች 7. የንብ ቀፎዎች 8. ሌላ
9.5	በቤትዎ ውስጥ የትኞቹ ይገኛሉ?	አዎ የለም 1. ሬዲዮ/ቴፕ 1 2 2. ቴሌቪዥን 1 2 3. ፍሪጅ 1 2 4. አልጋ ከጥጥ/ስፖንጅ ስፕሪንግ ፍራሽ ጋር 1 2
9.6	ከዚህ የቤተሰብ አባላት ውስጥ የሚከተሉት ያለው አለ?	አዎ የለም 1. የሞባይል ስልክ 1 2 2. ብስክሌት 1 2 3. ሞተር ብስክሌት 1 2 4. ጋሪ 1 2 5. መኪና /የጭነት መኪና 1 2 6. ባጃጅ 1 2
9.7	የቤታችሁ ወለል ከምን የተሰራዉ ነዉ	1-ከጭቃ/በ እበት የተለቀለቀ 2-ከሲሚንቶ 3-ሴራሚክ
9.8	የቤታችሁ ጣራ ከምን የተሰራ ነው	1-ከሳር 2-ከቆርቆሮ 99-ሌላ ካለ ይገለፅ
9.9	የቤታችሁ ግድግዳ ከምን የተሰራዉ ነው	1-እንጨት እና ጭቃ 2-ብሎኬት 99-ሌላካለ ይገለፅ
9.10	ቤታችሁ ስንት የአልጋ ክፍሎች አሉት	

9.11	የእንስሳት ማደሪያ የተለየ ክፍል አላችሁ	1-አወ 0- የለም		
9.12	ኩሽና ቤት አላችሁ	1-አወ 0- የለም		
9.13	ኤሌክትሪክ መብራት አላችሁ	1-አወ 0-የለም		
9.14	ምግብ ለማብሰል የምትጠቀሙት ምንድን ነው	1-እንጨት 2-ከሰል 3-ባዮጋዝ 4.ናፍጣ 5- ኤሌክትሪክ		
9.15	ምን አይነት ሽንት ቤት ነው ያላችሁ	1-የለንም 2-ባህላዊ 3-ቪአይፒ 99-ሌላካለ ይገለፅ		
9.16	የምትጠቀሙት ምን አይነት ውሃ ነው	1- ወንዝ 2-ምንጭ 3-ጉድድ 4-ቧንቧ		
ክፍል 2: የማህበረሰብ አቀፍ የጤና መድን በተመለከተ				
10.	ከተመዘገቡ/አባል ከሆኑ ምን ያክል ግዜ ሆኖታል	----------አመት		
11.	የትኛው የጤና ተቋም ነው የሄዱት	1-ጤና ጣቢያ 2-ሆስፒታል 3-ሁለቱም	1 2 3	
12.	ለምን ያክል ጊዜ ነው ወደ ጤና ተቋም የሄዱት	1-አንድ ጊዜ ብቻ 2-ከ 2 - 5 ጊዜ 3- ከ 5 ጊዜ በላይ	1 2 3	
13.	ከማህበረሰብ አቀፍ የጤና መድን ጋር የሚገናኝ ስብሰባ ተሰብስበው ያውቃሉ	1-አዎ 2-የለም	1 2	
14.	የጤና መድን አባልነት አይነት	1-ከፋይ አባል 2-የክፍያ ቅናሽ የተደረገላቸዉ/ ከክፍያ ነጻ የሆኑ አባል	1 2	
ክፍል 3: የማህበረሰብ አቀፍ የጤና መድን ጥቅማ ጥቅም እዉቀትን በተመለከተ				
15.	የማህበረሰብ አቀፍ የጤና መድን የጤና ወጭን የምንቀንስበት ጥሩ መንገድ ነው	1-አወ 2-አይደለም	1 0	
16.	የማህበረሰብ አቀፍ የጤና መድን አገልግሎት የሚያካትታቸው የመንግስት ተቋማትን አገልግሎት ብቻ ነው	1-አወ 2-አይደለም	1 0	
17.	የማህበረሰብ አቀፍ የጤና መድን አገልግሎት የሚያካትታቸው የሀገር ውስጥ ህክምናን ብቻ ነዉ	1-አወ 2-የለም	1 0	
18.	የማህበረሰብ አቀፍ የጤና መድን የትራንስፖርት (የመጓጓዣ) ወጭን አይሸፍንም	1-አወ 2-የለም	1 0	
19.	የማህበረሰብ አቀፍ የጤና መድን ተኝተዉ ለሚታከሙ ወጭን ይሸፍናል	1-አወ 2-የለም	1 0	
20.	የማህበረሰብ አቀፍ የጤና መድን የተመላላሽ ታካሚዎችን ወጭ ይሸፍናል	1-አወ	1	

		2-የለም	0	
21.	የማህበረሰብ አቀፍ የጤና መድን የውበት ህክምና ወጭን አይሸፍንም	1-አዎ 2-የለም	1 0	
22.	የማህበረሰብ አቀፍ የጤና መድን የኩላሊት እጥበት ህክምና ወጭን አይሸፍንም	1-አዎ 2-የለም	1 0	
ክፍል 4: ከጤና አገልግሎት ጋር የተገናኙ ጥያቄዎች				
23.	በቅርብ ከሚገኘዉ ጤና ተቐም ለመድረስ ስንት ሰዓት ይወስዳል	---------		
24.	በቅርብ ጊዜ ከቤተሰብ የታመመ ሰዉ ወደ ጤና ተቋም በሄዱበት ወቅት የላብራቶሪ ምርምራ ተደርጎላቸዋል	1-አዎ 2-አልተሰጠም	1 2	
25.	በቅርብ ጊዜ ከቤተሰብ የታመመ ሰዉ ወደ ጤና ተቋም በሄዱበት ወቅት ታማሚዉ አስፈላጊዉን የላብራቶሪ ምርምራ አግኝተዋል ብለው ያስባሉ	1-አዎ እስማማለሁ 2-አልስማማም	1 2	
26.	በቅርብ ጊዜ ከቤተሰብ የታመመ ሰዉ ወደ ጤና ተቋም በሄዱበት ወቅት መድሀኒት ተሰጥቶቹሃል	1-አዎ 2-አልተሰጠም	1 2	
27.	በቅርብ ጊዜ ከቤተሰብ የታመመ ሰዉ ወደ ጤና ተቋም በሄዱበት ወቅት ትክክለኛዉን/የሚፈልጉትን መድሀኒት አገኝተዋል ብለው ያስባሉ	1-አዎ እስማማለሁ 2- አልስማማም	1 2	
28.	እኔ/ቤተሰቤ ጤና ተቋም በሄድኩበት/በሄድንበት ጊዜ በአፋጣኝ አገልግሎት አግኝቻለሁ	1-እስማማለሁ 2-አልስማማም	1 2	
29.	የጤና አገልግሎት የሚሰጡ የጤና ባለሙያዎች በክብር አስተናግደውናል/እንደ ወንድምና እንደ እህት ያቀርቡን/ያነጋግሩን ነበር	1-እስማማለሁ 2-አልስማማም	1 2	
ክፍል 5: የማህበረሰብ አቀፍ የጤና መድን እርካታን በተመለከተ				
30.	የማህበረሰብ አቀፍ የጤና መድን አገልግሎት በሚከፈትበት/ የስራ ሰአት ደስተኛ ነን	1-በጣም አልስማማም 2-አልስማማም 3- ሀሳብ የለኝም 4-እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	
31.	በማህበረሰብ አቀፍ የጤና መድን ካርድ አሰጣጥ ሂደት ላይ ደስተኛ ነን	1-በጣም አልስማማም 2-አልስማማም 3-ሀሳብ የለኝም 4-እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	
32.	የምዝገባ ክፍያ ከከፈልን በኃላ የማህበረሰብ አቀፍ የጤና መድን አገልግሎት ለመጠቀም በወሰደው/በፈጀዉ ጊዜ ደስተኛ ነን	1-በጣም አልስማማም 2-አልስማማም 3-ሀሳብ የለኝም 4-እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	

33.	በማህበረሰብ አቀፍ የጤና መድን ገንዘብ ክፍያ መርሀ ግብር ደስተኛ ነን	1-በጣም አልስማማም 2-አልስማማም 3-ሀሳብ የለኝም 4-እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	
34.	በአከባቢያችን ያለው የማህበረሰብ አቀፍ የጤና መድን አስተዳደር እምነት የሚጣልበት ነው	1-በጣም አልስማማም 2-አልስማማም 3-ሀሳብ የለኝም 4-እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	
35.	በማህበረሰብ አቀፍ የጤና መድን ህግ መሰረት በአከባቢዎ ባሉት የመንግስት ጤና ጣቢያዎች መጀመሪያ እንዲጎበኙ/እንዲታከሙ እና ሪፈራል ሰንሰለት እንዲከተሉ ይጠበቅበዎታል፡፡ በዚህ ደስተኛ ነዎት	1-በጣም አልስማማም 2-አልስማማም 3-ሀሳብ የለኝም 4- እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	
36.	በማህበረሰብ አቀፍ የጤና መድን ዙሪያ በሚሰጠው መረጃ ተደስተናል	1-በጣም አልስማማም 2-አልስማማም 3- ሀሳብ የለኝም 4- እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	
37.	የማህበረሰብ አቀፍ የጤና መድን በያዛቸው ፖኬጆች (ጥቅል አገልግሎቶች) ተደስተናል	1-በጣም አልስማማም 2-አልስማማም 3- ሀሳብ የለኝም 4- እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	
38.	የማህበረሰብ አቀፍ የጤና መድን አባል ሆኖ መቆየት ያስደስተናል (እንፈልጋለን)	1-በጣም አልስማማም 2-አልስማማም 3-ሀሳብ የለኝም 4-እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	
39.	የማህበረሰብ አቀፍ የጤና መድን አገልግሎትን ሌሎች እንዲጠቀሙት እመክራለሁ	1-በጣም አልስማማም 2-አልስማማም 3-ሀሳብ የለኝም 4-እስማማለሁ 5-በጣም እስማማለሁ	1 2 3 4 5	

አመሰግናለሁ!

DECLARATION

This thesis result is entitled level of satisfaction with CBHI scheme and associated factors among households of Bibugn district, Northwest Ethiopia was carried out by me under the supervision of Mr. Getasew Taddesse and Mr. Asmamaw Ketemaw from Bahir Dar University, College of Medicine and Health Sciences, for the award of MSc Degree in Health system and Project Management.

I declare that this thesis is original and has not been presented or published in this University or institution.

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