

ENROLLMENT STATUS OF COMMUNIT-BASED HEALTHINSURANCE AND  
ASSOCIATED FACTORS AMONG HOUSEHOLDS IN PAWI WOREDRA, METEKEL ZONE  
BENISHANGUL GUMZ REGION, NORTHWEST ETHIOPIA



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A RESEARCH THESIS TO BE SUBMITTED TO THE DEPARTMENT OF HEALTH  
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JUNE, 2022

JIMMA, ETHIOPA

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## ABSTRACT

**Background:** Community-based health insurance is a promising concept towards financial hardships associated with paying for health services. Ethiopia is a low-income country with more health spending out-of-pocket payments by households and recently introduced the community-based health insurance scheme. However, its status of enrollment and associated factors are not well studied in the Benishangul Gumuz region of Ethiopia in general and in Pawi woreda in particular.

**Objective:** To assess the enrollment status of community-based health insurance and associated factors in Pawi Woreda, Metekel Zone Benishangul Gumuz Region, Northwest, Ethiopia;2021.

**Methods:** A community-based cross-sectional study was conducted among a randomly selected sample of 435 households in Pawi Woreda from June 23 to August 23, 2021. Data were collected by using an interviewer-administered structured questionnaire and analyzed using SPSS version 25. Descriptive statistics were computed to present the data and describe the study participants. Then bivariate and multivariate logistic regression analysis was done to identify associations between dependent and independent variables at P-value <0.05.

**Result:** The overall enrollment status of the households in community-based health insurance was found to be 65.7%. Merchants (AOR= 0.47; 95%CI: 0.28, 0.79), and daily laborers (AOR=0.42; 95%CI: 0.20, 0.89) were less likely to be enrolled in to the CBHI as compared to farmers. Those in the highest wealth tertiles (rich) were about 40% lower to be enrolled in to the CBHI as compared to the lowest wealth tertiles (poor) (AOR=0.68; 95%CI: 0.39, 0.97). Those who had good knowledge (AOR=4.33; 95%CI: 2.72, 6.89) and favorable attitude (AOR=3.10; 95%CI: 1.91, 5.36) about CBHI were more likely to be enrolled as compared to those having poor knowledge and unfavorable attitude, respectively. Existence of chronic illness in the increased the likelihood of CBHI enrolment by nearly three times (AOR=2.64; 95%CI: 1.23, 5.68).

**Conclusion:** The overall enrollment status of the households in community-based health insurance (65.7%) is better than the statuses of studies in the other parts of the country; but, still low to reach every household in the study area. Occupation, wealth index, knowledge, attitude and existence of chronic illness in the family were the factors affecting enrollment of the households in community-based health insurance in the study area. Hence, improving the knowledge and attitude of the community about the benefits of the CBHI is an urgent issue.

**Keywords:** *Community Based Health Insurances, Enrolment status, Pawi woreda.*

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## **ACRONYMS AND ABBREVIATIONS**

AOR	Adjusted Odds Ratio
CBHI	Community Based Health Insurances
CI	Confidence Interval
ETB	Ethiopian Birr
FMOH	Federal Ministry of Health
LMIC	Low and Middle-Income Countries
OOP	Out Of Pocket
SNNPRS	Southern Nations, Nationalities and People's Regional State
UHC	Universal Health Coverage
USD	United States Dollar
VHI	Voluntary Health Insurance
WHO	World Health Organization
WTP	Willingness-To-Pay

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## CHAPTER ONE: INTERDICTION

### 1.1. Background

Globally, 150 million people per year suffer from financial catastrophic shock, and 100 million are pushed into poverty because of direct payments for health services. In the majority of African countries, more than 40% of their total health expenditure was constituted by out-of-pocket payment (OPP) and this resulted in the scarcity of funds for health(1).

As part of the health insurance schemes, Community Based Health Insurance (CBHI) schemes are becoming recognized as a powerful method to achieve universal health coverage and reduce the financial catastrophic shock of the community(2).

Community-based health insurance is an emerging and promising concept that addresses health care challenges faced in particular by the rural poor and workers of the informal sector, moving away from out of pocket (OOP) payments for health care at the time of use to prepayment through health insurance, an important step towards financial hardships associated with paying for health services(3).

Community-based health insurance operates by pooling risks and resources at the community level. In such schemes, individuals or households in a community voluntarily pay a predetermined amount of money in return for a benefits package consisting of health services. It has the potential to provide financial protection and increase utilization of health services and mobilize additional resources for health. In addition, given the CBHI's participatory decision-making and management structures, they might be more transparent and accountable and enhance community empowerment as well as voice. It also helps the community build trust and encourages familiarity with the concept of insurance(4).

However, after twenty years of implementation experience of CBHI, several middle and low-income countries, including Ethiopia, still face tremendous challenges in initiating, sustaining, or scaling-up of the CBHI.(4) Many of the existing CBHI schemes have enrolled only a small proportion of the population, reducing their ability to broaden coverage in terms of population and services provided.

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## 1.2. Statement of the problems

Health financing is a core function of health systems that can enhance progress towards universal health coverage (UHC) by improving effective service coverage and financial protection. But, globally, millions of people do not access services due to the cost. Many others receive poor quality of services even when they pay out-of-pocket. Hence, carefully designed and implemented health financing policies, including health insurance schemes, can help to address these issues(5).

Health insurance is attracting more and more attention as a means for improving health care utilization and protecting households against impoverishment from out-of-pocket expenditures. The World Health Organization (WHO) also considers health insurance as a promising means for achieving universal healthcare coverage(6).

Community-Based Health Insurance (CBHI) schemes exist in many countries around the world and evidence shows that the existing small numbers of people insured under these schemes have resulted in some improved access to health services. However, the contribution of CBHIs to universal health coverage (UHC) remains limited; they largely remain small funding pools with limited benefits and therefore provide limited protection against the financial consequences of illness(7).

Most low- and middle-income countries (LMIC) rely significantly on private health expenditure in the form of out-of-pocket payments (OOP) and voluntary health insurance (VHI). In addition, the existence of small-scale schemes in some countries has added to the fragmentation and the lack of coherence of health financing systems at countries level(8).

Africa has witnessed a renewed interest in CBHI schemes as countries leverage communities to expand risk-pooling coverage to informal sectors and the rural population in the last ten years. However, the existing literature shows that the enrolment status in most of the African countries remains low(9).

Ethiopia is one of the low-income African countries with more health spending limited to out-of-pocket payments by households for several years. To address this challenge, the country has introduced the CBHI initiative in 2011 as a pilot. It was set up as a community-based health project that gathers payments made by members into a fund, which covers basic health care costs; thus, members are enabled access at local health care centers whenever they are sick(10).

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The CBHI stems from the Ethiopian Federal Ministry of Health's (FMOH) efforts to reach universal health coverage by improving overall financial protection for healthcare. According to the Ethiopian Health Insurance Agency report of 2020, in ten years period since its introduction in 2011, the CBHI has been introduced in 827 districts and over 32 million citizens who live in those districts have been covered in the health insurance system. However, more than 6.5 million of those who were registered in the health insurance system were people who could not afford to pay for their health insurance and the government has covered their expenses(11). Moreover, though the country has been implementing the CBHI scheme, to promote the health of poor rural and urban informal residents, the evidence shows that the enrollment rate is still low (<60%) when compared to the potential beneficiaries(12).

Benishangul Gumuz Region is one of the developing regions of Ethiopia that needs special support and has started the implementation of the CBHI scheme very recently after gaining experience in the four bigger regions(13).

Pawi Woreda is one of the districts in the region where the CBHI is started three years back. But, the status of enrolment by the households and associated factors are not studied in the Woreda. Therefore, this study aimed to assess the status of enrolment and associated factors at the household level.

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### 1.3. Significance of the study

Information on community-based health insurance enrollment by the households and associated factors are very much important for local evidence-based decision-making to further improve the coverage. Furthermore, it had an input for the interventions that aim to challenge the problem of low services utilization by the poor rural people because of inability to pay out-of-pocket and thereby enhance the progress towards the achievement of the universal health coverage in the region in particular and in the country in general.

It is also hoped that the study was available up-to-date baseline information for further research or increase the existing literature pool for researchers and the scientific community.

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## CHAPTER TWO: LITERATURE REVIEW

### 2.1. Status of Enrolment in the CBHI

Despite several efforts by the government of Ethiopia to ensure 100% coverage of the CBHI schemes, the existing local studies show that it is far below expected. In a cross-sectional study conducted in Borich District, Sidama Zone in 2020, the enrollment status of households in community-based health insurance was found to be (12.8%)(3).

Another mixed-methods study conducted in the resource-limited peripheral area of Southern Ethiopia in 2018 also found that the status of enrolment was 33.3%(14).

A similar finding has also been reported in other parts of the country. For example, in a study conducted in Northwest Ethiopia in 2018, 42% of the households were enrolled in CBHI.(13) and a study done in west Gojam Zone, Northwest Ethiopia (58%)(15)

### 2.2. Factors Affecting Enrolment in the CBHI

#### 2.2.1. Socio-demographic and economic factors

In the study done in Tanzania in 2017, the socio-demographics; including marital status, family size, and household with  $\geq 6$  members were significant associated factors with enrollment/re-enrollment rate(16).

In another study done in rural Burkina Faso, in 2012 the significant difference in overall mortality between households who could not have been members (because their area was yet to be covered by the stepped-wedged scheme), non-members but whose households could have been members (areas covered but not enrolled), and members of the insurance scheme(17).

In the study done in Nigerian Capital City in 2017, the attitude to the program was positive as many showed interest in participating and enrolling themselves (97.0%), some family members (96.3%), and entire family members (90.3%)(17).

The existing literature shows that socio-demographic characteristics such as educational status, family size, marital status, occupation of the head of household, and family income were among the determinants of enrolment in the CBHI in Ethiopia.

In a cross-sectional study done in Sidama Zone in 2020, the educational status of secondary school and above and the timing of collecting premium were significantly associated with the enrolment of CBHI. Similarly, in a study done in Jimma Zone, Southwest Ethiopia, having a

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large family size, and low economic and education status of households were identified as significant predictors of willingness to pay (WTP) and enrolment of the CBHI scheme(16).

Similar findings have been reported in studies conducted in West Gojam Zone, South Wollo Zone, Bugina District of Northeast Ethiopia, and rural Households of Southern Ethiopia(15).

For the Willingness to Pay in Socio-demographic factor in CBHI Scheme, Among Rural Communities in Gemmachis District, Eastern Ethiopia, 2019 the Age 18–29 years, 30–39 years, 40–49 years, 50–59 years, ≥60 years 18–29 years Educational level No formal education, read and write only, primary education, secondary and above Main occupation Farmer, housewife, merchant, other No formal education Farmer Wealth index Poor, medium, rich Poor Participation on idirs Yes, no Knowledge about CBHI Good, Poor Illness in the last year Yes(18).

In the study done in Ethiopia, December 2012, the enrollment of Community- Based Health Insurance Scheme is reached 45.5%(13).The other similar study was done in Northwest Ethiopia Socio-demographic factor, Age and educational status, self-rated health status, affecting enrollment. perceived quality of health services, knowledge, and information (awareness) about CBHI were among the characteristics of individual household heads, affecting enrollment(19).

Regarding the kitchen, 506 (80.6%) of respondents have a separate kitchen from their sleeping room. Concerning water sources, 580 (92.4%) of the respondents obtained water from tap water in their compound, 34(5.4%) from public tap water, and 377 (65.1%) of the respondents use jarcan and other materials to store it(20).

### 2.2.2. Knowledge and attitude towards CBHI

In a study done in Sidama Zone southern Ethiopia, lack of information, dissatisfaction with health care service received, and lack of trust in the CBHI scheme management were identified as determinant factors for enrolment(3).Similar findings have been reported in a study done in Jimma Zone, Southwest Ethiopia, and South Wollo Zone, Northern Ethiopia (Wollo study)(16).

In a study done in Northwest Ethiopia in 2018, participation in local associations that are assumed to increase their knowledge and attitude as well as build trust and serve as a measure of social capital, such as participation in local solidarity groups, credit and saving association, and religious memberships were significantly increased the enrolment of the householders into the CBHI schemes(14).

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The study was done in Northwest Ethiopia the factors, such as household, informal association, and health facility, as barriers to CBHI enrollment(21).The factor borrowing money in Nigerian Capital City 2017 to settle medical bills has occurred in 30% of instances. The majority of respondents were willing to pay premiums ranging from N450 (96.6%) to N1200 (72.5%) for simple packages that do not include surgery and hospitalization(22).

The study was done in the Bangladesh Journal of Medical Science in 20(02), Lack of awareness regarding insurance, lack of trust in management, unaffordability of insurance premiums(23). The other study was done in Gemmachis District, Eastern Ethiopia, 2019 the Knowledge About CBHI Scheme All respondents (440) had heard about CBHI, Health extension workers, 189 (43.0%) and radio/television, 84 (19.1%) were their dominant source of information. and more than three out of five, 276 (62.7%) participants had good knowledge about the benefits package and basic principles of community-based health insurance. Almost all (98.6%) of the respondents were participating in the indigenous(18).

### 2.2.3. Presence of Chronic Illness (DM, HPTN, Renal) In the Family

In a study done in Sidama Zone, the existence of chronic illness in the family was among the factors significantly associated with current enrollment status in CBHI(3).

In a cross-sectional study done in West Gojam Zone also, the existence of the chronic disease in the family was significantly associated with an enrolment of CBHI(15).

In the study done in South Wollo Zone, Northeast Ethiopia in 2018 the availability of chronically ill family members increased the CBHI enrolment(19).

The study done in rural households of Bugna District, Northeast Ethiopia in 2019 showed that attending formal education, history of illness, household size and awareness about the CBHI scheme, and wealth status were factors significantly associated with enrolment and willingness to pay(1).

A similar study in Gemmachis District, Eastern Ethiopia, 2019 Health care Related Factors was more than one-third (36.4%) of participants perceived their health status as good, forty-four (10%) participants had self-reported chronic illness while 289 (65.7%) participants had encountered illness in the last year. The majority, 373 (82%) of participants had sought medical treatment. Of the total respondents who sought medical care for their illness 109 (39.9%), participants have faced difficulty in getting money to pay for medical expenses. The mean medical expense of the participants was 538.4(18).In the study done in Northwest Ethiopia 2018, mixed methodology, Household size, and participation in an informal association, such as

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local credit associations, were also positively associated with CBHI enrollment. Additionally, health facility factors like the unavailability of laboratory tests were the main factor that hinders CBHI enrollment(19).

#### 2.2.4. Distance from Health facility and perceived quality of care

Poor quality of care, lack of managerial commitment, lack of trust and transparency, unavailability of basic logistics and supplies were also barriers for CBHI enrollment(24). Similarly, in a study done in West Gojam Zone, distance from the health facility and perceived quality of care were among the major determinants of CBHI enrolment(14). In a study done in rural Burkina Faso 2012, the risk of overall mortality increased significantly with distance to health facilities (35% more outside Nouna town)(15). A similar study has done at the Bangladesh Journal of Medical Science in 20(02), limited coverage of services in insurance plans, ambiguity regarding preexisting conditions, negative marketing by drop-outs, and exclusion of vulnerable groups were some of the common reasons among the uninsured group. Insured members of the scheme also had little knowledge about the scheme(23).

In the study done in Ethiopia, overall household satisfaction with CBHI was 91.38 %. There was a significant association between health service provision and CBHI members' satisfaction scores. Household heads that strongly disagreed with laboratory services provision had an average 0.878 decrease in CBHI satisfaction score compared to household heads that strongly agreed. CBHI process and management-related factors were also significantly associated with satisfaction(24). In Gemmachis District, Eastern Ethiopia, 2019 time to reach the health facility is  $\leq 30$  minutes,  $>30$  minutes, student, daily laborer, CBHI, Community-Based Health Insurance, No  $>30$  minutes(18).

### 2.3. Conceptual framework of the study

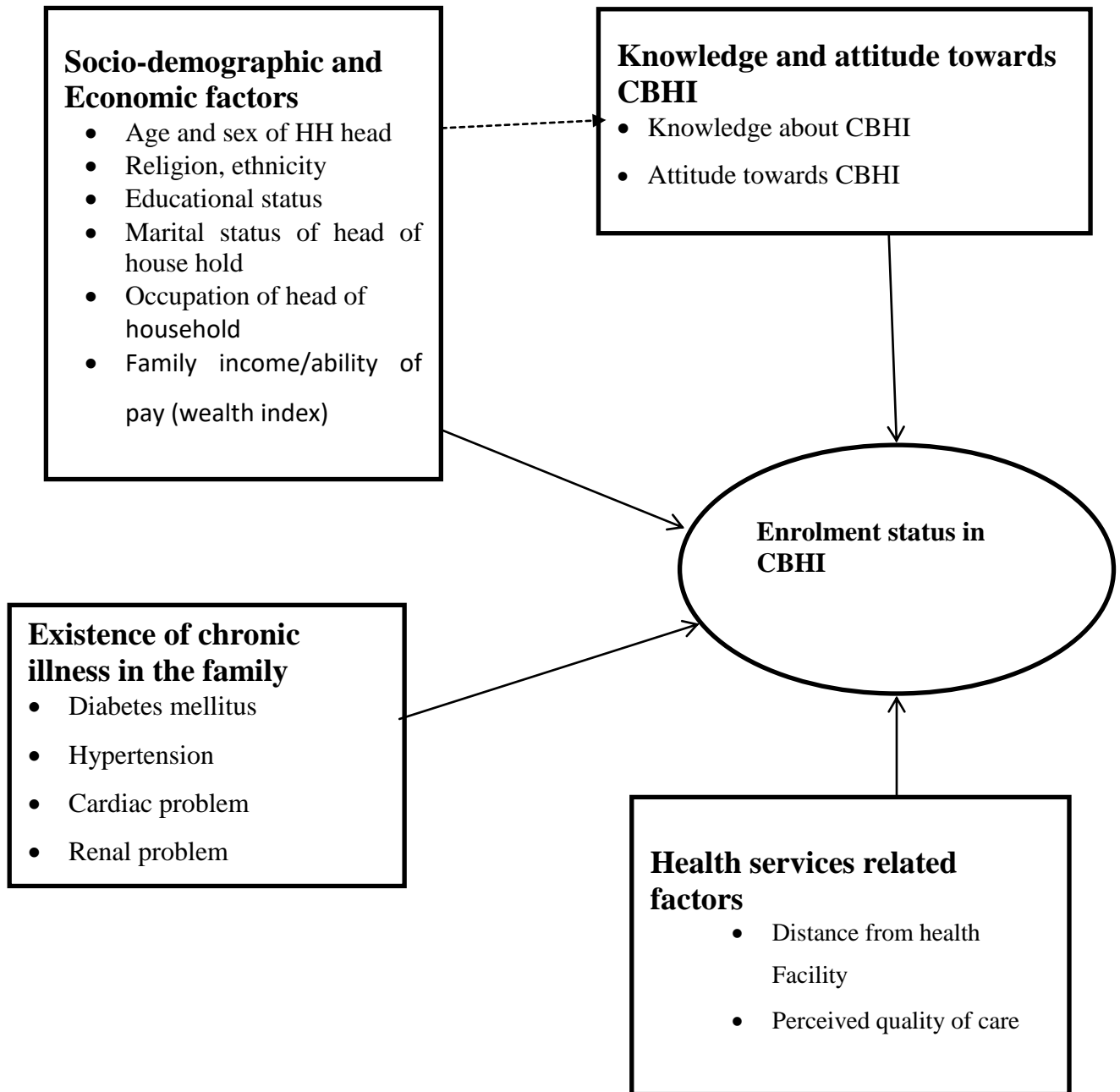


Figure 1: Conceptual framework of the study to identify factors associated with Enrollment of CBHI, Pawi Woreda, Benishangul Gumuz Region, Northwest Ethiopia, 2021.

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## CHAPTER THREE: OBJECTIVES

### **3.1. General Objectives**

- To assess the enrollment status of CBHI and associated factors in Pawi Woreda, Benishangul Gumuz Region, Northwest Ethiopia, 2021

### **3.2. Specific Objectives**

- To assess the enrollment status of CBHI in Pawi Woreda, Benishangul Gumuz Region, Northwest Ethiopia, 2021
- To identify factors associated with the status of CBHI enrollment, Benishangul Gumuz Region, Northwest Ethiopia, 2021

## CHAPTER FOUR: METHODS AND MATERIALS

### 4.1. Study area and period

This study was conducted in Pawi Woreda, Benishangul Gumuz Regional State, Northwest Ethiopia. Pawi Town, the capital of the Pawi Woreda is located 560 km Northwest of Addis Ababa, the capital of Ethiopia, and 390 Kms to the North Direction of Assosa the Capital city of Benishangul Gumz Region (Figure 3). Based total population of the woreda is estimated to be 68,122 (32,835 males and Females 35,287). In the Woreda, there are 21 kebeles (4 urban and 17 rural) with a total of 15,139 households. The Woreda has One General Hospital, two health centers, and ten health posts. Data collection was held from June, 23 to August 23, 2021.

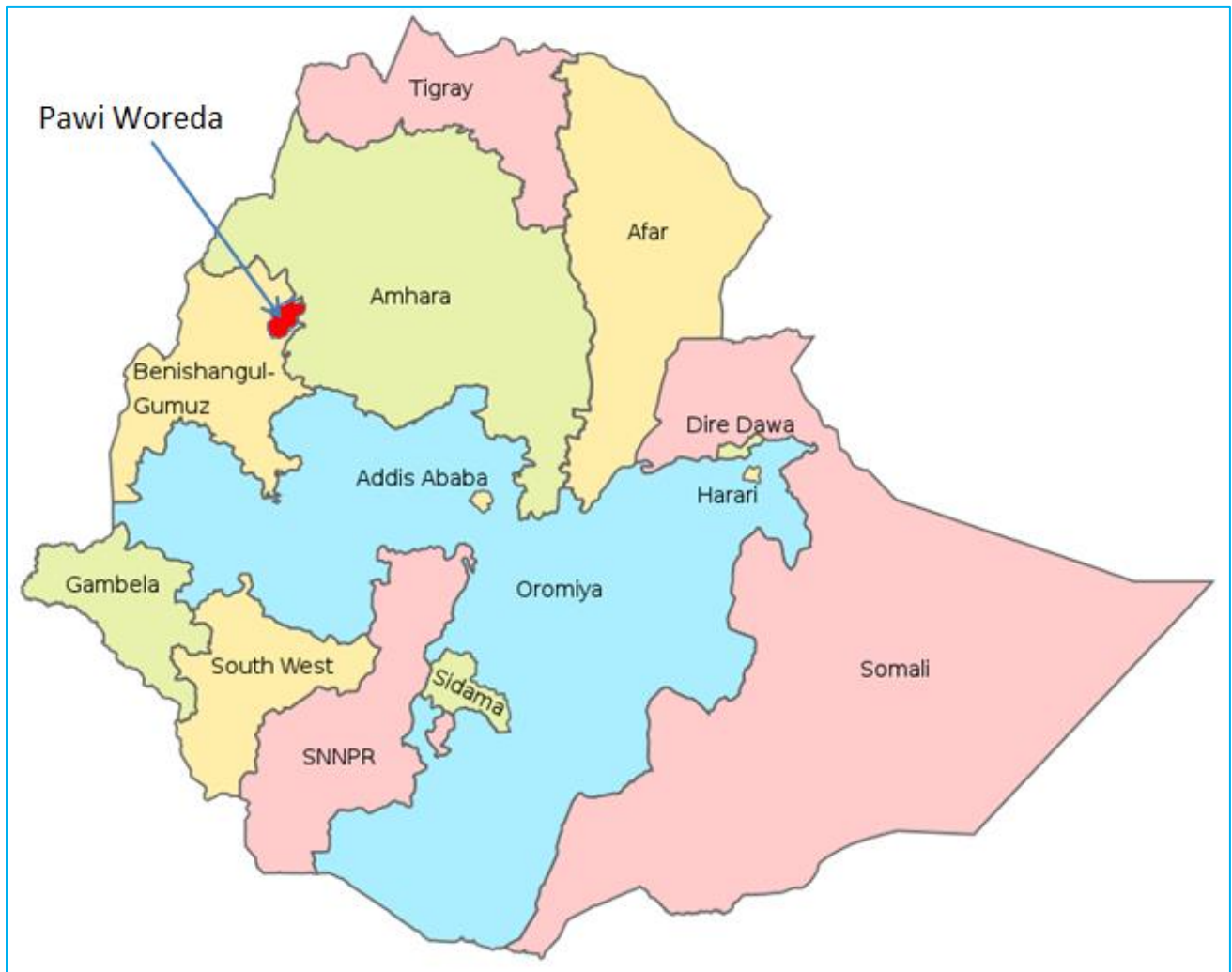


Figure 2: Map of the study area, Pawi Woreda, Metekele Zone, B/Gumuz Region, Northwest Ethiopia, 2021

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## 4.2. Study Design

A community-based cross-sectional study design was employed.

## 4.3. Population

### 4.3.1. Source population

The source populations for this study were all households found in Pawi Woreda.

### 4.3.2. Study Population

The study populations were selected households.

### 4.3.3. Sampling unit

The sampling unit was a selected household who was participated in the study.

### 4.3.4. Study unit

The study unit (respondent) was the head of the selected household or anyone elder and available at home in case of the absence of the head of the household during data collection time.

## 4.4. Inclusion and exclusion Criteria

### 4.4.1. Inclusion Criteria

All households with a family that lived for at least 6 months in the Kebeles to be selected were included in the study.

### 4.4.2. Exclusion Criteria

Households having all family members <18 years (e.g., students living in rented houses).

## 4.5. Sample size determination and sampling techniques

### 4.5.1. Sample Size determination

The minimum required sample size for the study was calculated by considering single population proportion formula based on the following assumption. The proportion of households enrolled in CBHI was 33% in a study conducted in Southern Ethiopia in 2018 (8). With a 95% level of confidence and a 5% margin of error as follows.

$$n = \frac{Z_{\alpha/2}^2 p(1-p)}{d^2} = \frac{(1.96)^2 0.33(1-0.33)}{0.05^2} = 340$$

Then, by adding 15% for non-response rate, the final sample size became  $378 + 57 = 435$ . Sampling methods

For resources (time and budget) about one-third (30%) of the Kebeles (7 out of 21) were selected using stratified sampling and a simple random sampling technique. Two of the 4 urban and 5 of the 17 rural Kebeles were selected by lottery method. Then, the sample size was distributed to the 7 Kebeles proportionally based on the size (number) of the households obtained from the Woreda. Then, by dividing the total households in the kebele by the allocated sample, the sampling interval (“K”) was determined. Finally, the first household was randomly picked starting from the nearest households to the Kebele administration and including every “k” interval. From each kebele until the required final sample size was attained. Our K value was  $k = N/n = 5785/435 = 13$ . The detailed sampling procedure is indicated below;

**Table 1:** Proportional allocation of the sample size for the study on CBHI enrollment and associated factors in Pawi Woreda, 2021

Kebeles selected	Total households in the kebele	Proportional allocation	Sample allocated to the kebele	Interval (K)
Kebele 1 of Village 7	1695	$(1695/5785) * 435$	<b>127</b>	$1695/127 = 13$
Kebele 5 (Almu)	978	$(978/5785) * 435$	<b>74</b>	$978/74 = 13$
Kebele 23/45	1309	$(1309/5785) * 435$	<b>98</b>	$1309/98 = 13$
Kebele 17	222	$(222/5785) * 435$	<b>17</b>	$222/17 = 13$
Kebele 30	635	$(635/5785) * 435$	<b>48</b>	$635/48 = 13$
Kebele 31	685	$(685/5785) * 435$	<b>51</b>	$685/51 = 13$
Medin Kebele	261	$(261/5785) * 435$	20	$261/20 = 13$
Total	5785		435	

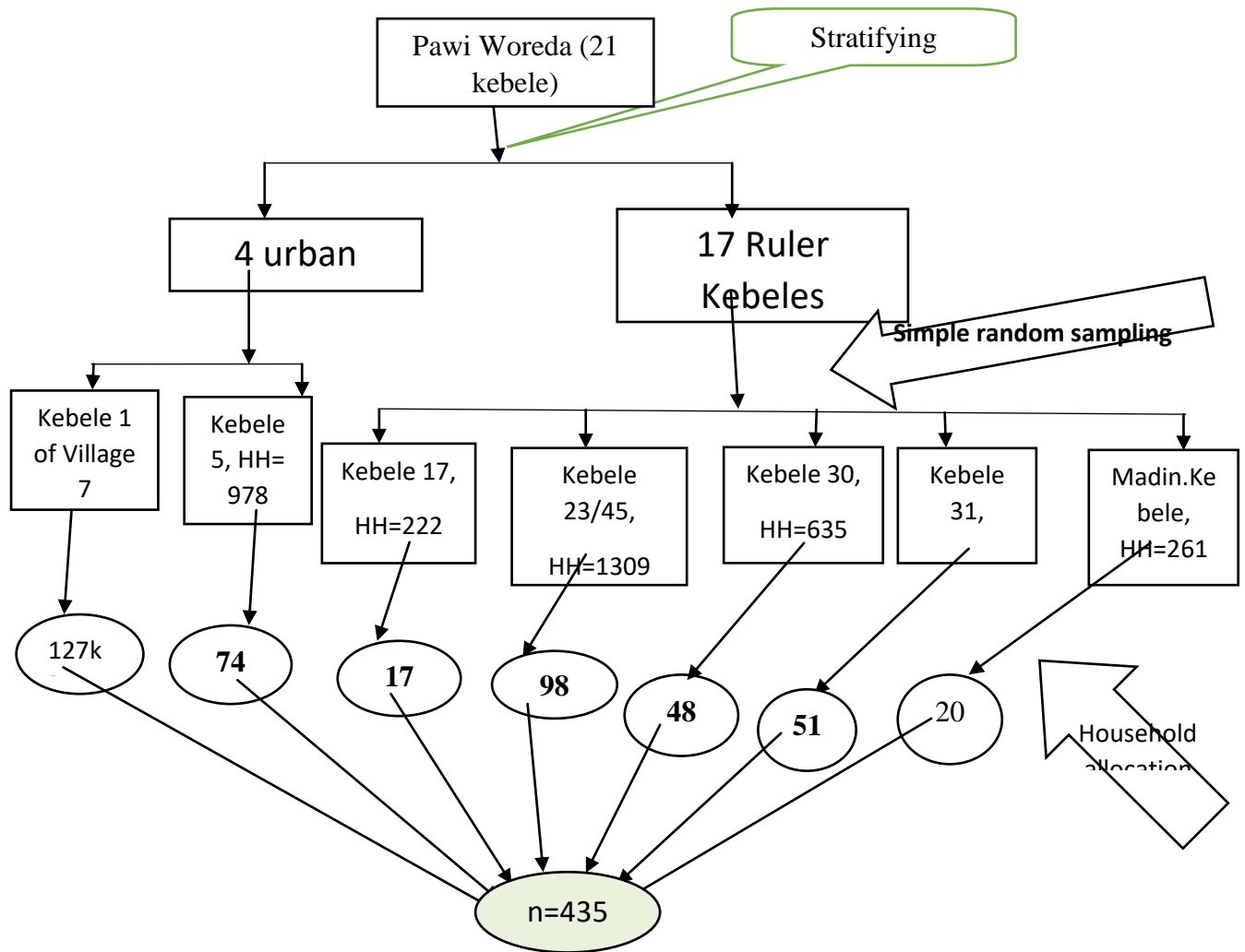


Figure 3: Schematic presentation of the Sampling methods, to study enrolment status of CBHI and associated factors, Pawi Woreda, B/Gumuz Region, Northwest Ethiopia, 2021

#### 4.5.2. Data collection tools

Data was collected by using an interviewer-administered questionnaire which is prepared in English and then translated into the local language Amharic and back-translated to English by different people to look for its consistency.

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#### 4.5.3. Data collectors and supervisors

The data was collected by seven 10<sup>th</sup> grades completed from woreda and supervised by two BSc holders from Pawi Health Science College. Both data collectors and supervisors were trained for two days before actual data collection.

#### 4.5.4. Data collection

Data was collected through a house-to-house visit by the data collectors and interviews with the head of the household.

### 4.6. Study Variables

#### 4.6.1. Dependent variables

Enrollment status to Community Based Health Insurance (CBHI)

#### 4.6.2. Independent variables

- Socio-demographic and Economic: Age and sex of HH head, Religion, ethnicity, Educational status, family size, marital status of head of the household, occupation of the head of household, family income/ ability
- Knowledge and attitude towards CBHI: Knowledge of family members (particularly HH head), an attitude of family members (particularly HH head), trust on the CBHI management, participation in local associations, Willingness to pay
- Presence of chronic illness in the family: diabetes mellitus, hypertension, cardiac problem, renal problem
- Distance from the health facility, perceived quality of care, and expected type of services: Time to reach the nearby facility, Long time waiting service card after paying, poor service as compared to payers, High payment as compared to OOP, appropriate use of service card, Poor services in governmental institutions, the unavailability of logistics and supplies of drugs and the hospital/health center.

#### 4.7. Operational definition

Community-based health insurance is an insurance scheme arranged for the informal sector, managed and operated by a governmental structure that provides risk pooling to cover all parts of the costs of health care services, at the household level for non-civil servants.

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Enrollment status in community-based health insurances: is acceptance of CBHI to use and, pay a premium for a complete year and possess an updated service card.

Knowledge CBHI: Participants who scored above 50% for the eight knowledge questions were considered to have good knowledge of the scheme whereas respondents who scored below this cut of point were considered to have poor knowledge(25).

Attitude towards CBHI: A respondent was considered as having a favorable attitude towards the community-based health insurance based on Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree when he/she correctly responded mean and above score of the eight attitude assessing questions. Otherwise, he/she was considered as having an unfavorable attitude(26).

Distance (in terms of in minutes/hr.): The time taken or the length from the residence to the institution longer or near, when an individual uses(25).

Family income: having many incomes by calculated index form.

#### 4.8. Data Quality Assurance

Two days of training were given to both data collectors and supervisors on the data collection tools and process of data collection and supervision, respectively. Revisit was done in case of incomplete and inconsistent responses. A pretest was done on 5% of the sample on a similar population in one of the non-selected Kebeles before the commencement of data collection and necessary adjustment was made to evaluate the reliability and validity of the survey instruments before the final distribution.

#### 4.9. Data processing and analysis plan

Data were checked, coded, and entered into Epi-Data 3.1 and exported to SPSS Version 25 software. Data cleaning was performed to check the accuracy and consistency of variables. Descriptive statistics were computed to describe the study participants. The significance of independent variables was checked by using logistic regression. A candidate variable was identified by bivariate logistic regression with a p-value of  $< 0.25$ . All the candidate variables were entered in multivariate logistic regression and variables having  $p < 0.05$  were declared as having a statistically significant association. AOR with 95% CI was determined to look at the strength of the associations. Model fitness was tested by using Hosmer and Lemshw's test and the dataset was the best fit for the model ( $p = 0.896$ )

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#### 4.10. Ethical Consideration

Ethical clearance was obtained from the institutional review board (IRB) of the Institute of Health of Jimma University before actual data collection. An official letter was written from the Woreda Administration to each Kebele to get permission to conduct the study. Finally, oral informed consent was obtained from each respondent before the actual data collection. The right to withdraw or stop at any time was also being granted.

#### 4.11. Dissemination of the finding

The finding of the study will be disseminated through presentation to JU in public defense and submitting the final report. A summary of the report will also be submitted to the Pawi Woreda responsible office (Health Office and CBHI Office). Publication of the article in a reputable journal is also considered.

## CHAPTER FIVE: RESULTS

### 5.1 Socio-Demographic Characteristics

A total of 435 participants participated in the study giving a response rate of 100%. More than half, 252(57.9%) were rural residents. Nearly half, 228(52.4%) were Amhara by ethnicity, followed by Agaw94(21.6%). The mean age of the respondents was 40.36 (SD  $\pm$ 9.367) years. More than a third, 206 (47.1%), of the study participants, were farmers and had no formal education, 195 (44.8%). The leading religion was 183 (42.1%) Orthodox Christian, followed by Muslim 182 (32.4%) (Table 2).

Table 2: Sociodemographic characteristics of the respondents, Metekel Zone, Benishangul Gumuz Region; Northwest Ethiopia, 2021 (n=435)

Characteristics	Categories	Frequency	Percent
Place of residence	Urban	183	42.1
	Rural	252	57.9
Sex of the respondent	Male	220	50.6
	Female	215	49.4
Age of respondents (in years)	20-24	10	2.3
	25-29	26	6.0
	30-34	62	14.3
	35-39	107	24.6
	40-44	97	22.3
	45-49	72	16.6
	>49	61	14.0
Educational status	No formal education	195	44.8
	Primary	141	32.1
	Secondary or above	99	22.8
Religion of the respondent	Orthodox	183	42.1
	Muslim	159	36.6
	Protestant	58	13.3
	Catholic	35	8.0
Marital status	Married	370	85.1
	Single	26	6.0
	Widowed	22	5.1
	Divorced	17	3.9
Occupational status	Farmers	206	47.1
	Merchant	178	40.9
	Daly workers	52	12.0
Ethnicity	Amara	228	52.4
	Agaw	94	21.6
	Kambata	61	14.0
	Hadiya	39	9.0
	Shinasha	8	1.8
	Others	5	1.1

## 5.2 Socio-Economic status of the households of the respondents

More than half, 222 (51.0%), of the respondents use piped water for drinking, whereas, 207(47.6%) use a public hand pump. The majority of the respondents, 298(66.4%), use the traditional pit latrine and followed by flush toilet 138(31.7%). Most of the study participants, 330(75.9%), had owned and live in their own homes. Firewood, 411(94.5%) was the main source of energy for cooking (Table 3).

Table 3: Socio-Economic status of the respondents, Metekel Zone, Benishangul Gumuz Region; Northwest Ethiopia, 2021 (n=435)

Characteristics	Categories	Frequency	Percent
The main source of drinking water	Pipe water	222	51.0
	Public hand pump	207	47.6
	Public tap	5	1.1
	Protected dug well	1	2
Kinds of toilet facility	Flush toilet	138	31.7
	Ventilated Improved Pit (VIP)	5	1.1
	Traditional Pit latrine	298	66.4
	open field	3	0.7
Residential Home	Own home	330	75.9
	Rented home	100	23.3
	Kebele homes	4	0.9
	Others	1	0.2
Type of fuel mainly used for cooking	Firewood	411	94.5
	Electricity	16	3.7
	Charcoal	8	1.8
Wealth Index (wealth quintiles)	Poorest	87	20.0
	Poor	88	20.2
	Middle Class	86	19.8
	Reach	87	20.0
	Richest	87	20.0
	Total	435	100.0

## 5.3: Knowledge of respondents about CBHI

About 313(72%) knew that the CBHI is based on the concept of social health insurance and about 343(78.9%) explained that the CBHI aims to ensure that every Ethiopian people has access to good health care services. Similarly, about three-fourths, 318 (73.1%), know that CBHI is not only for the rich people, and about four-in-five, 346 (79.5%), know that CBHI gives an advantage to the poor by collecting and redistributing resources. Know that according to the CBHI rule, all individuals including the poor and the rich pay as per their income (not equal

amount an equal amount) 306(70.3) When the composite score was calculated, 219(50.3)of the respondents were found to have good knowledge of the CBHI (above or equal to the mean score) (Table 4).

**Table 4:** Knowledge about CBHI of the respondents Metekel Zone, Benishangul Gumuz Region; Northwest Ethiopia, 2021 (n=435)

	<b>Frequency</b>	<b>Percent</b>
Know that the CBHI is based on the concept of social health insurance	313	72%
Know that CBHI aims to ensure that every people has access to good health care services	343	78.9%
Know that CBHI is not only for the rich people	318	73.1%
Know that CBHI gives an advantage to the poor by collecting and redistributing resources	346	79.5%
Know that a contribution made by the insured person entitles him/herself, spouse, and children under the age of 18 years	286	65.7%
Know that according to the CBHI rule, all individuals including the poor and the rich pay as per their income (not equal amount an equal amount)	306	70.3%
<b>Overall knowledge score</b>		
<b>Poor Knowledge</b>	<b>216</b>	<b>49.7</b>
<b>Good Knowledge</b>	<b>219</b>	<b>50.3</b>

#### **5.4: Attitude of respondents towards CBHI**

Overall attitude score the study participants, was more Favorable Attitude than either Non Favorable Attitude. When the composite indicator was determined, 342 (78.6%) had an overall favorable attitude towards the CBHI (greater or equal to the mean score) (Table 5).

**Table 5:** Attitude of household/respondents Metekel Zone, Benishangul Gumuz Region; Northwest Ethiopia, 2021 (n=435)

<b>Overall attitude score</b>	<b>Frequency</b>	<b>Percent</b>
Non Favorable Attitude	93	21.4
Favorable Attitude	342	78.6

### 5.6: Enrolment of the household into the CBHI

The majority of the respondents, 286(65.7%), have registered and enrolled for the CBHI at kebele. For those, who were not enrolled, the leading reason was lack of interest in the CBHI (44.6%), followed by not having money to pay (17.8%) (Figure 4& Figure 5).

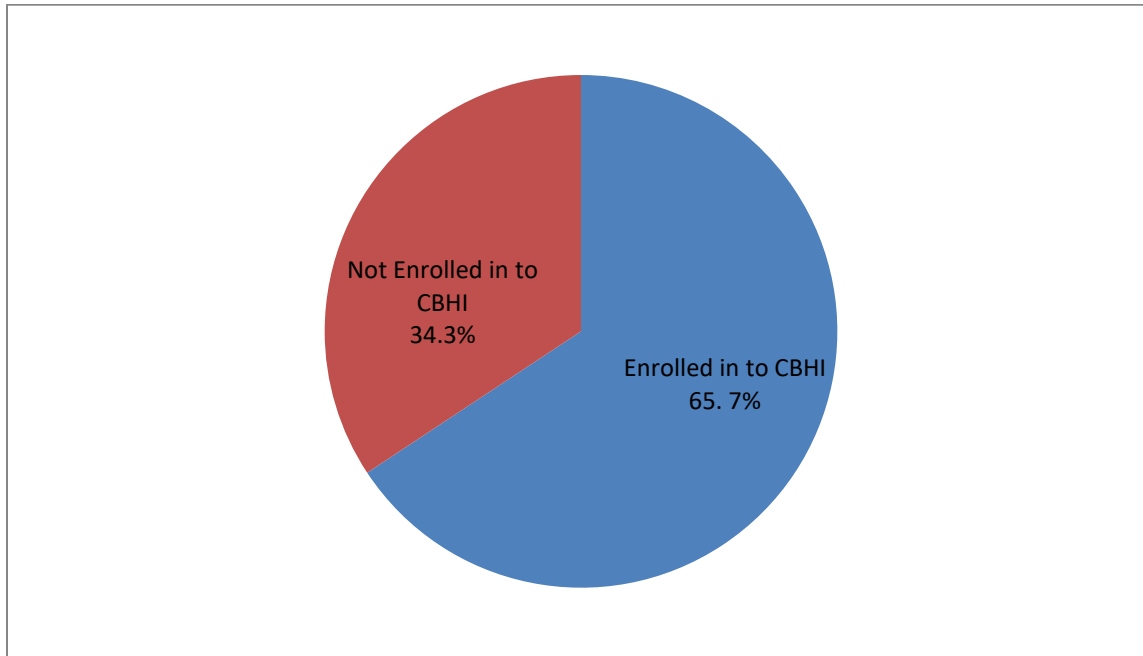


Figure 4: Enrolment of the household into the CBHI Metekel Zone, Benishangul Gumuz Region; Northwest Ethiopia, 2021 (n=435)

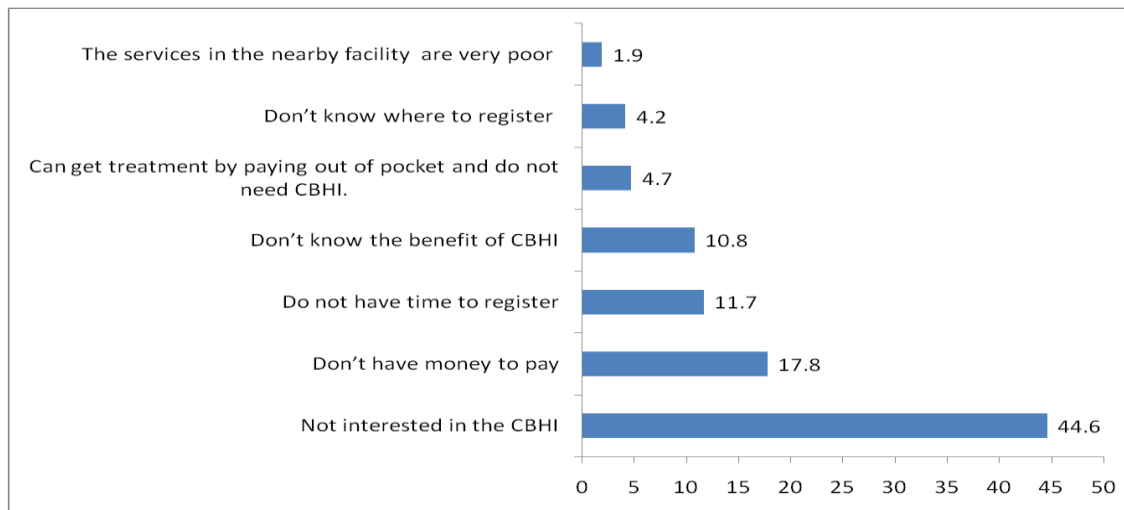


Figure 5: Reasons for not enrolling in the CBHI, Pawi Woreda, Metekele Zone B/Gumuz Region, Ethiopia, 2021

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## 5.7. Factors associated with CBHI enrolment

In the bivariate analysis, all the independent variables indicated in the conceptual framework and listed under the independent variables were considered. Among the socio-demographic and economic variables considered, respondents' place of residence, educational status, occupation, religion, and wealth index were found to have  $p < 0.25$  and identified as candidates for the multivariate logistic regression analysis. Besides, the knowledge and attitude of the respondents about CBHI and the existence of chronic illness in the family were found to have  $p < 0.25$ , and were selected as candidates

However, after adjusting for confounders in the multivariate binary logistic regression analysis, occupation of the respondents, wealth index, knowledge and attitude of the respondents about CBHI, and the existence of chronic illness in the family were found to have  $p < 0.05$  and identified as factors having statistically significant association with the CBHI enrolment.

Regarding the occupational status, merchants (AOR= 0.47; 95%CI: 0.28, 0.79), and daily laborers (AOR=0.42; 95%CI:0.20, 0.89) were less likely to be enrolled in to the CBHI as compared to farmers. After adjusting all the confounders, the wealth index has a negative relationship with the CBHI enrolment. Those in the highest wealth tertiles (rich) were about 40% lower to be enrolled in to the CBHI as compared to the lowest wealth tertiles (poor)(AOR=0.68; 95%CI: 0.39, 0.97).

Those who had good knowledge (AOR=4.33; 95%CI: 2.72, 6.89) and a favorable attitude (AOR=3.10; 95%CI: 1.91, 5.36) about CBHI were more likely to be enrolled as compared to those having poor knowledge and unfavorable attitude respectively. Similarly, the existence of any chronic illness in the family in the 12 months before the survey had increased the likelihood of CBHI enrolment by nearly three times (AOR=2.64; 95%CI: 1.23, 5.68) (Table 8).

Tble6: Factors Associated With Enrollment Status of Community-Based Health Insurance, of the household, Metekel Zone, Benishangul Gumuz Region; Northwest Ethiopia, 2021 (n=435)

Variables	CBHI Enrolment status		Crude OR (95%CI)	Adjusted OR (95%CI)
	Enrolled (n=286) N(%)	Not enrolled (n=149) N(%)		
Place of residence				
Urban	114(62.3)	69(37.7)	1.00	1.00
Rural	172(68.3)	80 (31.7)	1.30(0.87, 1.94)	1.10(0.69, 1.77)
Educational status of respondent				
No formal education			1.00	1.00
Primary (1-8)	62(67.4%)	46 (32.6)	1.06(0.67, 1.67)	1.26(0.74, 2.15)
Secondary or above (>=9)	62(62.6)	37 (37.4)	0.86(0.52, 1.42)	1.34(0.73, 2.38)
Occupation of respondent				
Farmer	151(73.7)	54(26.3)	1.00	1.00
Merchant	105(59.0)	73(41.0)	0.51(0.33, 0.79)	<b>0.45(0.28,0.79)</b>
Daily laborer	30(57.7)	22(42.3)	0.49(0.26, 0.92)	<b>0.42(0.20,0.89)</b>
Religion of the respondent				
Orthodox Christian	124(67.8)	59(32.2)	1.00	1.00
Muslim	101(63.5)	58(36.5)	0.83(0.53, 1.30)	0.71(0.42,1.19)
Protestant	37(63.8)	21(36.2)	0.84(0.45, 1.57)	0.87(0.43,1.74)
Catholic	24(68.6)	11(31.4)	1.04(0.48, 2.26)	0.86(0.36,2.06)
Wealth Index (tertilis)				
Poor	100(69.9)	43(30.1)	1.00	1.00
Middle class	94(64.4)	52(35.6)	0.78(0.48, 1.27)	0.68 (0.39, 1.42)
Rich	91(62.8)	54(37.2)	0.73(0.44, 0.98)	<b>0.61(0.38, 0.97)</b>
Knowledge of CBHI				
Poor knowledge	109(50.5)	107 (49.6)	1.00	1.00
Good Knowledge	177 (80.8)	42(19.2)	4.14(2.70, 6.36)	<b>4.33(2.72, 6.89)</b>
Attitude toward CBHI				
Non-favorable	42(43.3)	55(56.7)	1.00	1.00
Favorable	244(72.4)	94(27.7)	3.40(2.13, 5.42)	<b>3.20(1.91, 5.36)</b>
Chronic illness in the family				
No	236 (63.1)	138(36.9)	1.00	1.00
Yes	50 (80.2)	11(18.0)	2.66(1.34, 5.28)	<b>2.64(1.23, 5.8)</b>

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## **CHAPTER SIX: DISCUSSION**

The results of this study revealed that the overall status of enrollment of the households in community-based health insurance was found to be 65.7%. Though this is lower than the national plan to reach every household by the CBHI (100% coverage), it is higher than findings of a study conducted in the East Gojam Zone, Amhara region of Ethiopia in 2018 (58%) (15); in Sidama Zone in 2020 (12.8%) (3), in the resource-limited periphery of SNNPR in 2018 (33.3%) (14), Northwest Ethiopia in 2018 (42%) (13) And rural Bahir Dar in 2014 (39%). The difference may be due to the strong efforts in the Woreda in the last year or maybe a setting difference.

In this study occupation and family income (wealth index) had a significant association with the enrollment of CBHI. In the same way, merchants, and daily laborers, who were supposed to have better income in terms of money and better capacity to pay, were less likely to be enrolled in the CBHI as compared to farmers. Similarly, those who were in the better socio-economy (relatively in the rich wealth category) were less likely to be enrolled as compared to those with the lowest socio-economy (poor wealth category).

This finding is also consistent with the studies conducted in Sidama Zone (3), Northwest Ethiopia (15), Jimma Zone (16), and Nigeria (22). This may be explained by the reason that those who have money (rich) can get treatment for themselves and their families by paying out of their pocket and may not be interested in the CBHI assuming they were paying for the poor.

This will have a crucial programmatic implication for the implementers in enforcing to everyone that CBHI is a mandatory scheme whether poor or rich employed or not based on their capacity to pay. Otherwise, if it is only the poor who are paying, the goal of the redistribution of the resources by the CBHI may not be realized.

In this study knowledge and attitude of the respondent had a statistically significant association with the enrollment in the CBHI. Those who had relatively good comprehensive knowledge and a favorable attitude had about three times more likely to be enrolled in the CBHI scheme. This is also consistent with the previous studies conducted in other parts of the country where

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knowledge and attitude were the important predictors of enrolment in the CBHI (3, 13-16, 21-23).

This is explained by the fact that when the head of the household has better knowledge about the benefits of CBHI, he/she will have a better attitude towards it. This in turn will directly lead to the willingness to accept, get registered, and pay for the CBHI.

This will have the important programmatic implication that not only introducing the CBHI and collecting money but rather strong social and Behavioral change communication on the benefits of the CBHI by any available means including the government structure (HEWs, DAs) and non-formal community-based structures like Idir, religious institutions and others.

The existence of any one of the chronic diseases such as HTN, DM, and cardiac and renal problems in the family also increased the likelihood of enrollment in the CBHI by about three times. This had also been reported in previous studies (3, 15, and 19). This may be explained by the reason that when there are chronic diseases in the household, the family may not be able to pay for the repeated follow-ups and treatment of the diseases. As a result, they try to join the CBHI thinking that the CBHI will cover the cost of the treatment.

### **Strengths of the study**

- This study has a strong side in that it was conducted in a remote part of the country in an unstable and security problem setting (Pawi Woreda) in the Metekel Zone of the Benishangul Gumuz region.
- It tried to estimate wealth index than simple household income and considered different factors affecting CBHI enrollment.

### **Limitations of the study**

- This study may have its limitation due to its cross-sectional nature which may not ascertain the temporal relationship.

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## **CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION**

### **7.1. Conclusion**

This study revealed that the status of enrollment of the households in community-based health insurance in the study area is lower than the national plan of reaching every household; however, better than the findings of most studies in other parts of the country. Occupation, wealth index, knowledge, attitude, and the existence of chronic illness in the family were the factors affecting enrollment of the households in community-based health insurance in the study area.

### **7.2. Recommendations**

#### **Pawi Woreda Health Office**

- Increasing the knowledge and attitude of the community on the benefits of the CBHI by designing multi-dimensional IEC/BCC interventions, including via HEWs, DAs, Idir, religious institutions, and other community-based structures.
- Strengthen the CBHI program by building the capacity of workers and reinforcing everyone to enroll in the CVBHI on a mandatory, not voluntary basis.

#### **Each Kebele Administrator**

- Promote the CBHI in the community through different meetings and community forums and encourage the community to the enrollee in the CBHI.

#### **Researchers**

- Conducting the research at a large scale at least to know the status at the regional level and identify more factors by including qualitative studies and program side factors as this study was limited to the community perspectives.

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ANNEX

English version questionnaire

JIMMA UNIVERSITY

INSTITUTE OF HEALTH

MASTER OF PUBLIC HEALTH HOUSEHOLD SURVEY QUESTIONNAIRE FOR PAWI  
URBAN AND RURALES KEBELE BENSHEGUL, Ethiopia, 2021

Consent form to conduct interview

Greeting:

Hello, my name is\_\_\_\_\_. I am master of student in Jimma University.

Your household has been randomly chosen in this postgraduate student. I would like to ask you a series of questions about enrolment status of community-based health insurances and Associated Factors in Pawi Woreda.

The survey is confidential exercise and your name will not be disclosed anywhere. you have the right not to participate and the right to answer or not for questions which might be inconvenient for you. But your cooperation andwillingness are helpful in identifying problem of the study. Please feel free to answer these questions as they will help future community development, but it may take some minute would you be willing to have a discussion with me?

Yes  No

Name of interviewer: \_\_\_\_\_

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

Time started: \_\_\_\_\_

Time finished \_\_\_\_\_

Woreda: \_\_\_\_\_ kebele: \_\_\_\_\_ Zone: \_\_\_\_\_ House No: \_\_\_\_\_ Date of interview:  
\_\_\_\_\_

Part 1: Socio-demographic characters of house holed in pawiworeda

NO	Question	Categories	SKIP
101	Age of household head/respondent?	_____	
102	Sex of household head/respondent?	1. Male 2. Female	
103	Religion of household head/respondent?	1. Orthodox Christian 2. Muslim 3. Protestant 4. Catholic 5. Other specify _____	
104	Resident of household head?	1. Urban 2. Rural	
105	Educational status of household head?	1. No formal education 2. Primary 3. Secondary	
106	Family size of household head?	1. Male____, 2. Female _____, Total____	
107	Marital status of household head?	1. Married 2. Single 3. Widowed 4. Divorced	
108	Occupation of household head?	1. Farmers 2. Merchant 3. Daily workers	
109	Family income / ability of pay of household head?	_____	
110	Ethnicity of household	1. Amhara 2. Agaw 3. Kenbata 4. Shenasha 5. Gumuz 6. Oromo 7. Hadeya 8. Other_____	

Part 2: Socio-Economic status of household in pawiworeda

201	What is the main source of drinking water for members of your household	<ol style="list-style-type: none"> <li>1. Pipe water</li> <li>2. Public hand pump</li> <li>3. Public tap/standpipe ('Bono')</li> <li>4. Protected dug well</li> <li>5. Unprotected dug well</li> <li>6. Protected spring</li> <li>7. Unprotected spring</li> <li>8. Rain water</li> <li>9. Other (specify) _____</li> </ol>
202	What kind of toilet facility do you have that your household members use?	<ol style="list-style-type: none"> <li>1. Flush toilet</li> <li>2. Ventilated Improved Pit (VIP) latrine</li> <li>3. Traditional Pit toilet/latrine</li> <li>4. No facility-use open field</li> <li>5. Other (specify) _____</li> </ol>
203	How is your residential home ownership?	<ol style="list-style-type: none"> <li>1. Own home</li> <li>2. Rented home</li> <li>3. Kebele homes</li> <li>4. Other (specify) _____</li> </ol>
204	How many rooms/classes does your household have	_____ rooms
205	Do you have a separate room which is used as a kitchen?	1. Yes 2. No
206	What is the main material of the floor of the home? (RECORD BY OBSERVING)	<ol style="list-style-type: none"> <li>1. Natural floor-earth</li> <li>2. Natural floor-dung</li> <li>3. Rudimentary floor with wood/bamboo</li> <li>4. Finished floor with cement</li> <li>5. Other (specify) _____</li> </ol>
207	What is the main material of the roof of the home? (RECORD BY OBSERVING)	<ol style="list-style-type: none"> <li>1. Thatched</li> <li>2. Corrugated iron sheet</li> <li>3. Other(specify) _____</li> </ol>
208	What is the main material of the well of the home? (RECORD BY OBSERVING)	<ol style="list-style-type: none"> <li>1. No wall</li> <li>2. Wood without mud</li> <li>3. Wood with mud</li> <li>4. Wood with cement covered</li> <li>5. Cement blocks or Bricks</li> <li>6. Other(specify) _____</li> </ol>
209	What type of fuel do you mainly use for cooking in your household?	<ol style="list-style-type: none"> <li>1. Electricity</li> <li>2. Firewood</li> <li>3. Kerosene</li> <li>4. Charcoal</li> <li>5. Other(specify) _____</li> </ol>
210	Does your household own the following?	
	Electricity?	1. Yes 2. No

	Radio?	1. Yes	2. No
	Television?	1. Yes	2. No
	A landline telephone functioning?	1. Yes	2. No
	Refrigerator?	1. Yes	2. No
211	Does any member of your household own the following?		
	Watch?	1. Yes	2. No
	Mobile phone?	1. Yes	2. No
	Bicycle?	1. Yes	2. No
	Motor cycle?	1. Yes	2. No
	Animal drawn cart?	1. Yes	2. No
	A car or truck?	1. Yes	2. No
212	Does any member of this household own any agricultural land?	1. Yes	2. No
213	If Yes to Q211, how many hectares?	_____ hectares	
214	Does this household own any livestock, herds, other farm animals, or poultry?	1. Yes	2. No
215	If yes, how many:		
	Cattle?	_____	
	Milk cows?	_____	
	Horses, donkeys?	_____	
	Goats?	_____	
	Sheep?	_____	
	Chickens?	_____	

Part 3: Knowledge about CBHI: in pawiworeda

301	Have you ever heard the term CBHI?	1. Yes 2. No	
302	If yes, what is your source of information?	1. from health workers 2. at health facility 3. Kebele leaders 4. TV 5. Radio 6. Mass media 7. Idir 8. Others specify _____	
303	Do you know that the CBHI is based on concept of social health insurance?	1. Yes 2. No	
304	The CBHI aims to ensure that every Ethiopia people has access to good health care services?	1. Yes 2. No	

305	The CBHI only serve for the reach people?	1. Yes 2. No	
306	The CBHI gives advantage for the poor by collecting and redistributing of resources?	1. Yes 2. NO	
307	A contribution made by the insured person entitles him/herself, spouse and children under the age 18 years	1. Yes 2. No	
308	According to the CBHI rule, all individuals including the poor and the rich pay equal amount.	1. Yes 2. No	

Part 4: Attitude question of household in pawiworeda

S/N	item/statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
401	The health care system in the country is properly funded and no need of CBHI.					
402	The government alone should pay for the health care cost (all free).					
403	The individual alone should pay for the health care cost.					
404	The employer alone should pay for the health care cost.					
405	Everyone both rich and poor should pay equally for the CBHI.					
406	Everyone must be registered and pay for the CBHI as per his income and family size.					
407	CBHI is advantages for the poor who are unable to pay than out of pocket payment.					
408	The riches shouldn't pay for CBHI as they have the capacity to pay and get treatment where ever they like.					

**Part 5: Enrolment in to the CBHI, the household in pawiworeda**

S/n	Questions	Responses
501	Have you registered for the CBHI at your Kebele?	1. Yes 2. No
502	If you have not registered for the CBHI, state the reasons why you have not registered	1. I don't know the benefit of CBHI 2. I don't know where to register 3. I am not interested in the CBHI 4. I do not have time to register 5. I don't have money to pay 6. I have the capacity to get treatment for my family by paying out of my pocket and do not need CBHI. 7. The services in the nearby facility at are very poor 8. Other specify_____
503	If yes (have registered), have you obtained your CBHI card?	1. Yes 2. No
504	If not obtained the card, what are the reasons?	
505	Have you utilized your CBHI for treatment in the last 6 months? <b>(only for those having card)</b>	1. Yes 2. No
506	If yes for what type of services?	
507	If not why?	
508	If utilized, are you satisfied with CBHI services?	1. Yes 2. No

**Part 6: Existence of chronic illness in the household in pawiworeda**

601	How do you rate the health status of you and your family?	1. Excellent 2. Very good 3. Good 4. Faire 5. Poor
602	Is Chronic illness in the years (in the last 12 month)	1. yes 2. No
603	If Yes Q#302, which one	1. Diabetes mellites 2. Hypertension 3. Cardiac problem

		4. Renal problem
604	Do you or another member of the household have chronic illness or who have been on follow up treatment?	1. Yes 2. No
605	Have you ever been member of micro group/saving used for health care cost or for any other else?	1. Yes 2. No
606	Is your HH graduated by HEW as model family?	1. Yes 2. No
607	If yes, how can you rate the quality of using exist in CBHI benefits packages?	1. Excellent, 2. Satisfactory 3. Poor
608	Have you made use of your CBHI membership to cover health care costs till now? (For CBHI members only)	1. Yes 2. No
609	If no, why did not you/your family benefit from CBHI?	1. No one in my HH has visited health facilities 2. We still pay other additional costs for treatment (specify) 3. The quality of service (waiting time, staff attitude, medicine, diagnostics) for CBHI members is not as good as for out of pocket paying patients (non- CBHI members) 4. Delays in issuance and distribution of CBHI ID cards 5. others, specify_____
610	When your current membership expires, would you renew your CBHI membership for the following year? (for members only)	1. Yes 2. No
611	If not, why do not you plan to renew your CBHI membership (multiple responses allowed)?	1. Illness and injury does not occur frequently in our HH 2. the registration fee and premiums are not affordable

		<p>3. there is limited availability and poor quality of health services</p> <p>4. The quality of service (waiting time, staff attitude, medicine, diagnostics) for CBHI members is not as good as for out of pocket paying patients (non- CBHI members)</p> <p>5. other, specify _____</p>
612	<p>Why do you think that your HH have not been a member yet? (multiple responses allowed) For non-members only</p>	<p>1. Illness and injury does not occur frequently in our HH</p> <p>2. the registration fee and premiums are not affordable</p> <p>3. there is limited availability and poor quality of health services</p> <p>4. The quality of service (waiting time, staff attitude, medicine, diagnostics) for CBHI members is not as good as for out of pocket paying patients (non- CBHI members)</p> <p>5. benefit packages of CBHI does not cover all services of health care (referral, transportation etc.)</p> <p>6. other, specify</p>
613	<p>Have you ever faced problem that delayed you not to visit health facility?</p>	<p>1. Yes</p> <p>2. No</p>
614	<p>If yes, what was the major reason for not visiting the health facility?</p>	<p>1. did not feel it was necessary</p> <p>2. facility too far</p> <p>3. lack of money for transportation</p> <p>4. did not feel that I would get quality care</p> <p>5. other, specify</p>
615	<p>Do you trust the CBHI committee?</p>	<p>1. Yes</p> <p>2. No</p>

Part 7: Health service-related factors In Pawi Woreda


701	Contractual health facility for the illness felt in the last 3 months?	1.Yes 2.No	If NO →Q405
702	How was your satisfaction with the health care services given or on health care providers?	1.Very satisfied 2.Satisfied 3.Indifferent 4.Dissatisfied 5.very dissatisfied	
703	How long have you and/or your family Waited to get the services?	1. Less than 30 minutes 2.30 to 60 minutes 3.1to 3 hours 4.3 to 6 hours 5. 6 hours and more 6.More than a day	
704	What was the availability of drugs/supplies look like?	1.Not available 2.Rarely available 3.Usually available 4. Always available	
705	What is the nearest HF to your home that is usually used for medical care?	1. HC 2. Clinic (private) 3. Hospital (Gov.) 4. Other specify _____	
706	How Long does it take to reach the nearby HF from your home?	Time in minutes_____	
707	Do you believe that you can pay if you are referred from H/C to Hospital for transportation?	1. Yes 2. No	If No stop here
708	If yes, how do you perceive the transportation cost for referral?	1 high 2 fair 3 cheap	

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DECLARATION

I, the undersigned, declare that this thesis is my original work under the Department of Health Policy and Management, Faculty of Public Health, Institute of Health of Jimma University and has not been presented for a degree in this or any other university and that all sources of materials used for the thesis have been fully acknowledged.

**Name of the student:** *Askal Bessie*




Signature:

Date: 8/6/2022

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

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