

Assessing Factors Associated with Poor Community Based Health Insurance for Client Satisfaction Level with Public Health Care Services in Negele Arsi District Health Centers, West Arsi Zone Ethiopia

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Citation: Fufa G, Wanamo TE, Mohammed AY, Wodera AL (2021) Assessing Factors Associated with Poor Community Based Health Insurance for Client Satisfaction Level with Public Health Care Services in Negele Arsi District Health Centers, West Arsi Zone Ethiopia. Arch Med Vol. 13 No. 5: 21

Abstract

Introduction: Community-Based Health Insurance (CBHI) schemes are emerging tool for providing financial protection for poor people living developing countries like Ethiopia. In Ethiopia, Community-Based Health Insurance (CBHI) was piloted in 13 districts and finally expanded to 427 districts, but satisfaction of community for the scheme and health service delivery is yet limited. Therefore, this study aimed to assess the satisfaction level of Community for health insurance.

Methods: A facility based cross-sectional study design was conducted from March and April, 2019 in Arsi Nagele Woreda health centers. Three hundred ninety eight participants who visited the health care facility during the study period were included for the study. The data was entered to Epi-data version 3.1 and exported to Statistical Packages for Social Sciences (SPSS) version 21.0 for analysis

Results: A total of 399 patients were participated in the study, yielding a response rate of 95%. 63.1% were male and 36.9% were females. The findings of the study showed that the overall client satisfaction level of CBHI with the health services received from the targeted health centers were 63.4%. Age, educational status, waiting time, drugs availability and knowledge were predictors for Clients satisfaction regarding service of community based health insurance. Qualitative dimension showed that the most unsatisfactory aspects for the Community Based Health Insurance (CBHI) health service were lack of skill personnel and availability of drugs at health facilities.

Conclusion and recommendations: This study showed higher clients' satisfaction level when compared to similar studies in the country. Young age, lack of drugs and supplies, poor information provision, long waiting time at consultation, were found to be the major predictors of dissatisfaction. Therefore, the district health offices should address and work on this predictor to regulate clients' satisfaction for Community Based Health Insurance (CBHI).

Keywords: Community-based health insurance; Predictors; Arsi negele; Ethiopia

Received: April 01, 2021; **Accepted:** May 14, 2021; **Published:** May 21, 2021

Introduction

The goal of universal health coverage requires escalation of service delivery and overcoming significant financial barriers. Nevertheless, globally, every year around 150 million people suffer from financial constraints and about 100 million are

pushed into poverty because of high out of pocket payments for health care services. Out of pocket expenditure for healthcare is a major problem in Low and Middle Income Countries (LMIC), as healthcare financing and access to affordable and effective healthcare is untangle [1].

To achieve the Universal Health Coverage (UHC) goal and to

resolve financial hardship as a result of receiving the health care, governments set public financing mechanisms from two main sources of funds which are general tax financing and social health insurance contributions. Both of these mechanisms involve pre-payments into a pooled fund for equitable distribution and most importantly compulsory contributions. This ensures that the healthy and wealthy cross-subsidize the costs of health services for the sick and the poor [2,3].

From diverse types of health insurances Community Based Health Insurance (CBHI) is one of the major one. It is an emerging and growing tool for providing financial protection to deprived individuals against health-related events. Community Based Health Insurance (CBHI) has the following characteristics: voluntary membership, a non-profit objective, they are linked to a healthcare provider, they pool risk, and there is an underlying ethic of mutual aid trust, enrolment, and solidarity [4].

It has emerged as a valuable alternative to user fees in rural Sub-Saharan Africa too, by pooling risks and resources at the community level, it also promises to ensure better access to health services and greater financial protection against the costs of illness for traditionally excluded and disadvantaged populations which mean for urban and rural self-employed and informal sector workers. Strong evidence showed that it improves service utilization and protect members financially by reducing their out-of-pocket expenditure, and that CBHI improves resource mobilization too.

In Ethiopia, overall level of catastrophic health expenditure was high among non-insured households when compared to insured one. Hence, it has significant financial protection from catastrophic health expenditure. The empirical studies which were focused on the impact of the insurance showed that Community Based Health Insurance (CBHI) is one of the mechanisms that help to improve health care utilization on top of other variables [5,6].

In Ethiopia, households out of pocket payments constituted about 37% of the total health expenditure. Such financing is regressive and hold up access to health services. Thus it was launched in June 2011 for rural population and the informal sector in urban areas to reduce household vulnerability to out-of-pocket health care expenditure an increasing quality of services to balance high demand of health care and low supply of medical services basically for rural households and people in urban informal sector, intended to cover 83.6% of the population in 13 districts in the four main regions (Tigray, Amhara, Oromia, and SNNPR) of the country. Then planned to be implemented in two stages, after piloting, it planned to scale up throughout the country drawing on lessons from the piloted phase as per FMOH in 2011 & FMOH in 2014 respectively.

Households are expected to pay 180 Birr (8.57 US\$) annually as a premium. The benefit of this package is its inclusive nature of all curative and preventive care services that is part of the essential health package in Ethiopia [4].

The utilization level of client for scheme is increasing, which is 72.3 percent. 26.3% of clients visiting a health facility when feeling sick were (MoH). Alongside assessing utilization level,

satisfaction level of the client on the service can have contribution for improvement of the program, improving healthcare services, shaping health policies and providing feedback on the quality, availability, and responsiveness of healthcare services. That is why this particular study focus on clients' satisfaction to ensure the quality of healthcare services provided by the health insurance scheme which are currently not much available in this context [7].

Research Methodology

Negele Arsi bordered on the south by Shashamene Zuria, on the southwest by Lake Shala which separates it from Shala, on the west from the Southern Nations, Nationalities and Peoples Region, The 2007 national census reported a total population of this woreda was 260,129, of whom 128,885 were men and 131,244 were women; 51,535 were urban dwellers. The study was conducted in Arsi Negele health centers, which is located at north East of West Arsi zone, Oromia region. Arsi Negele is found at southern part, 232 km away from the capital Addis Ababa [8]. The District has eight health centers and there is no hospital in the District. Arsi Negele enrolled community Based health insurance starting from 2008 E.C. The report of district showed that 4,460 were members and insured households' had access to health services according to their catchment. According to West Oromia CBHI office report at the end of (2010 E.C.) the average enrolment rate of Negele Arsi District reduced from 18.35% to 11.60% (end of 2009 E.C.) which is low enrolment and high dropout when compared from other areas which coordinate by the mentioned sector. Institution-based cross-sectional survey study was conducted in Arsi Negele District health centers, west Arsi zone, Oromia, Ethiopia, 2019.

Source population

The source populations include all insured clients enrolled during data collection period for quantitative and all informants from concerned sectors.

Study population

For quantitative study: The study populations were randomly selected insured client enrolled during data collection period from the source population.

For qualitative study: Purposively selected individuals included.

Study unit

Insured house hold head who had taken health service in health centers during data collection period were taken for quantitative and key informants were also selected for qualitative.

Sampling techniques

Among the health centers found in Woreda two of them are selected purposively. Accordingly, Kello Dure and Dello health centers selected to increase the representativeness of the targeted population. Systematic random sampling was used to obtain the final study participants and the first client to be included in the study was selected by lottery method and every two clients who completed their treatment particularly after they visit drug store of the center were interviewed.

Sample size determination for quantitative study

To determine the required sample size at a confidence level of 95%, and a 0.05 margin of error as given by Kothari [9] was applied. Single population proportion formula based on taking the Assuming 50% of households enrolled in the CBHI scheme were satisfied with the assumption of 50% of households' satisfaction with a community-based health insurance scheme in Ethiopia 2016 [10].

$$n = \frac{Z^2_{(\alpha)} * p(1-p)}{d^2} = (1.96)^2 (0.50(1-0.50)) / (0.05)^2 = 384$$

Where:

n= Sample size required for the study

Z= Standard normal distribution (Z=1.96) with 95% confidence interval

$\alpha=0.05$

P=Prevalence/ population proportion (p=0.91)

d= Margin of error (d=0.05)

The total sample size for first objective after adding non-response rate of 10% is 422.

Data measurement

For quantitative data: Insured Client who visits health center for utilization of Outpatient Department (OPD) was interviewed. Pre-test structured questioners were used. A structured questionnaire is adopted from Ethiopian Health Insurance Agency that was used for evaluation of community-based health insurance pilot schemes in Ethiopia [11]. It was translated in to local language (Oromifa) take interview of participants. The major parts of questionnaire were include, Health care service provider politeness, waiting time etc. the collection process of insurance cards, the time to make use of the CBHI program after payment of registration fee, schedule for paying of premium, the information provided, CBHI packages, want to stay enrolled in the CBHI scheme, recommending CBHI scale up to other settings) were used. The median is used to scale up the level of satisfaction.

Likert Scale was applied to assess the clients' satisfaction. The scales may lie between strongly agree to strongly disagree [9].

Health service related factors which were satisfied with laboratory services, waiting time, respect from service providers and services found friendly. The reliability coefficient (Cronbach's alpha) of the health services-related factors scale was 0.73 indicating internal consistency.

CBHI process-related factors Household heads were asked four questions on different aspects of CBHI process management on an ordinal scale from 'strongly disagree' to 'strongly agree' to yield a maximum score of 20 and a minimum score of 4.

These four items were based on the following questions: I am satisfied with the opening hours of the CBHI office; I am satisfied with the collection process of insurance cards; I am satisfied with the time to make use of the CBHI program after payment of

registration fee; and I am satisfied with the schedule for paying the premium. The reliability coefficient (Cronbach's alpha) of the CBHI process management factors scale was 0.73 indicating internal consistency [12-14].

For qualitative data: Qualitative dimension were an approach conducted for exploring and understanding the meaning individuals or groups attribute to a social phenomenon in which they are experiencing [15]. Then used to investigate the contextualization of community based health insurances design and implementation, quality of health care services and perceptions of health services providers about CBHI scheme on CBHI packages and the factors that affects the satisfaction of the client. Interviews by semi structured questioners were conducted for key informants and also after getting consent the recording of the voice were also taken from some of them and transcript properly and narrated by English.

Research Approach

Quantitative and Qualitative approaches

These studies were employed combination of mixed research approach which incorporates both qualitative and quantitative approaches. Mixed approach encompasses both quantitative and qualitative data help to comprehensively understand a research problem by addressing multiple interests by triangulating the method [15]. Triangulation method makes possible to obtain statistical, quantitative data from a representative sample survey, and individuals with CBHI scheme members and health care providers to probe or explore more deep information from qualitative data. Mixed approach resolve between the limitations of both approaches.

Sources of data

Primary source of data: Accordingly, the researcher collected primary data through survey and key informant interviews. Since, employing both primary and secondary data on a single research increases the validity, reliability and comprehensiveness of the research secondary data will be incorporated if it is related with pre-sated objectives of this study [9].

Secondary data sources: Official government documents, office reports, service provision manuals, and guidelines concerning community based health insurances, reports of evaluations client satisfaction, and quality of services was reviewed. Ethiopian healthcare financing police through CBHI scheme, mainly, the design and implementation of main parameters in Kebele level health care provision for insured households will critically examine.

Operational definitions

Level of satisfaction: Each question was scored on an ordinal scale from "strongly satisfaction to strongly dissatisfaction" to yield a maximum score of 20 and a minimum score of 4.

Adverse selection: This is the enrolment of those who are ill or more prone to illness in an insurance scheme compared to the healthier ones.

Capitation: This is a prospective means of paying health care staff based on the number of people they provide care for.

Catastrophic expenditure: This occurs when health care payments force households to borrow heavily, incur debts or to reduce their other basic expenditures on items like food, housing and clothing. A household is considered to be facing catastrophic financial health expenditure when it's out-of-pocket health payments is equal or more than 40% of its non-subsistence expenditure or health expenditures in excess of 10 percent of total household consumption.

Community-based health insurance: This is a form of health financing which is usually organized at community level and has outstanding features of being run as a not for profit schemes. It targets the informal sectors and applies the basic principles of risk sharing and members participation in the management of the schemes.

Health insurance policy: This is a contract between an insurance provider (e.g. a private health insurance company and an individual or his/her sponsor e.g. an employer or a community organization). The contract can be renewable (e.g. annually, monthly) or lifelong.

Health Insurance scheme: This is an insurance operated by a public agency where the premium takes the form of compulsory contribution which is deducted from the payroll as part of earning. Its membership is compulsory, it is run by public bodies either single or multiple organisations, and has redistribution policies.

Out-of-pocket: This is payment made by a patient directly to the provider at the point of service.

Premium: This is the amount of money the policy-holder or his sponsor (e.g. an employer) pays to the health care pre-payment plan to purchase health care coverage of specified benefits.

Private health insurance: This is a health care pre-payment plan that is taken up and paid for the discretion of individuals or employers on behalf of individuals.

Result

Socio-demographic and economic characteristics

A total of 399 respondents were participated in the study and the response rate was 95%. The mean age of the patients was 48.19 (13.87%) years. Almost half, 206 (51.6%) of the respondents were females (**Table 1**).

The reason for client visit the health facilities

Majority of the respondents 379 (95%) of the CBHI members visit health facilities due to non-infectious diseases while 20 (5%) where due to infectious diseases and among the prescribed drug majority 304 (76.2) of the client got some of them (**Figure 1**).

Overall Level of satisfaction of CBHI members towards health service in health facilities

To determine the overall satisfaction level of CBHI members with health service at health facilities, internal consistency (Cronbach's alpha) was first calculated for the scale items measuring

Table 1 Socio-demographic and economic characteristics of CBHI members in Arsi Negele District health facilities from March 25-May 31, 2019 (n=399).

Variables (n=399)	Frequency	Percent
Age of the patients (Years)		
15-24	32	8.0
25-34	45	11.3
35-44	47	11.8
45+	275	68.9
Sex of the patients		
Male	193	48.4
Female	206	51.6
Name of Health Center		
Kello Duro	202	50.6
Dolle	197	49.4
Educational status of the patients		
Illiterate	103	25.8
Reading and writing	76	19.0
Primary education (Grade 1-6)	86	21.6
Secondary education (Grade 7-12)	126	31.6
Vocational training	5	1.3
Tertiary education	3	0.8
Marital status		
Married	261	65.4
Divorce/Separated	31	7.8
Single	85	21.3
Widowed	22	5.5
Ethnic group		
Oromo	337	84.5
Amhara	21	5.3
Wolayeta	11	2.8
Kembata	14	3.5
Guragey	10	2.5
Other	6	1.5
Religion		
Muslim	307	76.9
Orthodox	65	16.3
Protestant	23	5.8
Catholic	4	1
Occupation of the patients		
Employed/Farmer	276	69.2
Non-employed	16	4
Student	85	21.3
Other	22	5.5
Family size		
1-3 person	148	37.1
>3	251	62.9
Income (ETB)		
<1000	78	19.5
1001-5000	198	49.6
5001-10000	94	23.6
>10001	29	7.3

satisfaction. This study showed that the items had a Cronbach's alpha of 0.79. The findings of the study showed that the overall

The reason of the respondents to visit health facility

■ infectious disease ■ Non infectious disease ■ Others

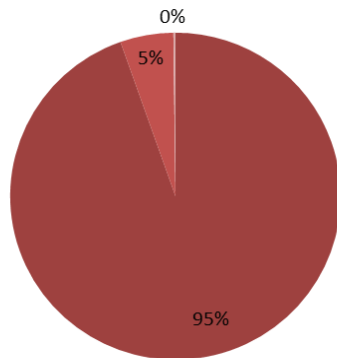


Figure 1 The reason for respondents for visiting health facilities in Arsi Negele District from March 25-May 31, 2019 (n=399).

client satisfaction level of CBHI with the health services rendered at the health center was 63.4% (95% CI=26.1-35.2) (**Table 2**).

Level of satisfaction of respondents with different components of health care services

Among the Outpatient clients, the way the health care provider examined the clients was the aspect where satisfaction was rated highest of 330 (82.7%) and satisfaction was rated lowest 87(21.8%) which is availability of drugs (**Table 3**).

Waiting time of the respondents at different service delivery point

The clients respond that waiting time less than 15 minutes were 342 (85.7%), 121 (30.3%), 322 (80.7%) and 5 (1.2%) at card room, consulting room, pharmacy and laboratory respectively. Two hundred and fifty six (62.9%) of the respondents revealed that waiting time at consulting room is greater than 30 minutes whereas waiting time at laboratory were 274 (68.8%) (**Table 4**).

Level of satisfaction of clients with the CBHI related factors

Majority of the respondents were satisfied by voluntarily enrolment and CBHI opening time (**Table 5**).

Factors associated with poor community based health insurance client satisfaction level towards health service provision

The bi-variant logistic regression analysis revealed that factors associated with poor community based health insurance client satisfaction level had association with age of the patients, educational status, waiting time at consulting room, CBHI members who have information about service, waiting time at laboratory, availability of laboratory service and availability of the drug at health facility [16-18].

Multivariate logistic regression analysis was carried out in order

Table 2 Getting the prescribed drug/supplies in Arsi Negele District health centers from March 25-May 31, 2019 (n=399).

Variables	Frequency	Percent	Cumulative Percent
Fully (all prescribed)	92	23.1	23.1
Partially or some of them	304	76.2	99.2
None	3	0.8	100.0
Total	399	100.0	

Table 3 Level of satisfaction of clients with the different components of health care services of CBHI members in Arsi Negele District health facilities from March 25-May 31, 2019 (n=399).

Characteristics	V. sat (%)	Sat. (%)	Neut. (%)	Dissat (%)	V.dissat (%)
Information provision by health workers	24.3	56.4	10	8	1.3
Time spent to see a health provider	14.5	67.2	5.3	12.3	0.8
Courtesy and respect	20.3	71.7	4	3.3	0.8
Privacy	24.8	51.6	6	14	3.5
Access to latrines	23.3	64.7	0	11	4
Cleanliness of latrines	17.3	21.1	2.5	57.4	1.8
Cleanness of wards	15	42.4	5	37.6	0
Queue process to see health provider	16.8	48.6	1.8	32.1	0.8
The way the health provider examined	28.1	54.6	5.3	11.3	0.8
Confidentiality	18	74.7	0	4.8	3.3
Availability of drugs	5.8	16	13.5	44.4	20.3
Overall waiting time	8	44.4	10.5	36.6	0.5
Visiting hours	4.5	42.6	0	35.6	17.3
Way questions & queries dealt by staff	24.8	37.5	10	27.5	0

v.sat = very satisfied; sat = satisfied; neut = neutral; dissat=dissatisfied; v.dissat=very dissatisfied

Table 4 Waiting time at different service delivery point of CBHI members in Arsi Negele District health facilities from March 25 – May 31, 2019 (n=399).

Variables	Waiting time	Frequency	Percentage
Card room	Less than 15 minutes	342	85.70%
	Between 15 to 30 minutes	37	9.30%
	More than 30 minutes	20	5.00%
	Total	399	100.00%
Consulting room	Less than 15 minutes	121	30.30%
	Between 15 to 30 minutes	27	6.70%
	More than 30 minutes	251	62.90%
	Total	399	100.00%
Pharmacy	Less than 15 minutes	322	80.70%
	Between 15 to 30 minutes	50	12.50%
	More than 30 minutes	27	6.80%
	Total	399	100.00%
Laboratory	Less than 15 minutes	5	1.30%
	Between 15 to 30 minutes	120	30.10%
	More than 30 minutes	274	68.70%
	Total	399	100.00%

to identify the independent determinant of poor community based health insurance client satisfaction level. Those variables which had P value of less than 0.25 in bivariate analysis were entered in multivariate analysis. Step wise back ward logistic regression method was employed. In multivariable analysis age of the patients, educational status, waiting time at consulting room, CBHI members who have information about service and availability of the drugs significantly associated with level of satisfaction of CBHI members toward health care service at health facilities.

Patients who aged from 15-24 years were less likely to satisfied with service compared to those above 45 years [AOR=0.34 (95% CI= 1.34-8.00)]. The formal educational status [AOR=0.45 (95% CI: 1.56-4.40)], waiting time at consulting room [AOR=1.98 (95% CI: 1.01-3.87)] and availability of the drug at health facility [AOR=4.71 (95% CI: 2.15-10.30)] were significantly associated with level of satisfaction of CBHI members toward health care service at health facilities. CBHI members who have information about service delivered in health facilities were 2 times at risk

of satisfied compared to their counterparts [AOR=2.11(95% CI: 1.29-3.47)] (Table 6).

Results of key informants

The Fifteen key informants were involved in the study. Those were Arsi Negele District health Officer (THO), HF (CBHI) manager, 2 PHCU head, 2 Health care provider (HCP), 1 community member representative(CMR) and Woreda Health Officer (DHO). The results of the interviews were consolidated and their responses quantified. Figures given in brackets indicate the number of quotes that were collected pertaining to the specific issue. For example, the index (CP 1) indicates that one quote with the specific issue of concern was collected from a chair person and (CP 2) denotes two quotations from two chair persons. The same applies to interviews from key informants. Plain numbers between brackets, for example (10), indicate that the issue was directly mentioned ten times in the interviews. Similarly, (1) is used to indicate one quote regarding an issue of concern collected from key informant with a scheme [19-22].

Table 5 Level of satisfaction of clients with the CBHI related factors of health care services of CBHI members in Arsi Negele District health facilities from March 25-May 31, 2019 (n=399).

Characteristics	V. sat (%)	Sat. (%)	Neut. (%)	Dissat (%)	V.dissat (%)
Voluntarily enrollment	16.0	21.8	16.8	40.9	4.5
CBHI office opening time	6.0	59.4	12.3	20.1	2.3
Satisfaction with paying premium	9.0	74.9	11.6	2.8	1.8
Satisfied with time interval to use benefit package	17.8	71.4	6.8	2.3	1.8

Table 6 Results in multivariable logistic regression showing determinants of level of satisfaction among CBHI members visiting health facilities in Arsi Negele District, Oromia region, March 25-May 31, 2019 (n=399).

Variables (n=399)	Patient Satisfaction		COR (95% CI)	AOR (95% CI)
	satisfied n	Not satisfied n		
Age in years				
15-24	16	17	0.34 (1.13-4.87)	0.30 (1.34-8.00)*
25-34	15	32	1.00 (0.52-1.94)	0.82 (0.38-1.76)
35-44	19	41	1.15 (0.63-2.12)	1.05 (0.52-2.10)
45+	78	181	1	
Educational status				
Illiterate	21	39	0.47 (1.05-5.07)	0.45 (1.95-6.86)*
Read and write	36	93	1.66 (0.83-3.33)	2.19 (0.92-5.27)
primary	27	40	2.89 (1.35-6.18)	3.05 (1.23-7.60)
Secondary	30	52	2.26 (1.09-4.68)	2.05 (0.87-4.84)
College and above	14	60	1	1
Waiting time				
<15 minutes	27	120	1	1
15 -30 minutes	63	102	2.62 (1.56-4.40)	3.00 (1.61-5.37)*
>30 minutes	20	45	1.98 (1.01-3.87)	2.39 (1.12-5.12)*
Availability of the drug				
Available (full/partially)	57	183	0.43 (0.28-0.66)	0.40 (0.24-0.66)**
Not available	71	101	1	
Information provision				
Yes	71	108	1.94 (1.23-2.96)	2.11 (1.29-3.47)*
No	57	176	1	

NB: 1-Reference group, * = P<0.05, ** = P<0.01

All (15) key informants said the majority of the CHIS enrollees' education qualification level was below secondary school certificate.

"This scheme is for people who didn't go to school and those with low income. If they don't afford to eat three meals per a day, what is about quality of medical care "Asked by CBHI manager)?

"One of the objectives of the CBHI is to improve income of poor and non-informal families in the target communities to meet their health financing need" said (one of the officials of Dolle health center said).

The essential medicines reported to be available at all times and were rarely out of stock (MS1, THO1, HCP2, CP1, and CBHI manager 1). One key informant reported that some time adequate drugs were not available in the facility: The ambulance services are not fully utilized by clients said CBHI manager, VCBHI).

The DHO suggested that the government employed health officers should also give more attention to CBHI members visiting health facilities.

Majority of the key informants were satisfied with the services provided under the scheme (THO 1, CP2, HCP2, CBHI manger 1) and only one key informants was dissatisfied (VHCP 1).

"The scheme does not cover all disease such as tooth related treatment and almost half of the prescribed drugs are not available in drug store therefore the clients are not utilized the card for getting drugs as they purchase from the town pharmacy said " (2 PHCU Head and 1 CMR)

To improve the quality of outpatient care services and to increase the satisfaction level of CBHI members on the service it is recommended: employing more staff to reduce waiting time. At least one health professional should have to be assigned for CBHI program at health center level to facilitate the whole process (THO1, HCP1, and CP1), and continues job training of existing staff on client care behavior, easy financing system on reimbursement and other strategies should have to be created on drug issues such as creating link with private pharmacies to deliver drugs to clients who couldn't get in the compound (2 PHCU head, HCP & CMR).

With regards to health care providers' approach- Five key informants were satisfied with the services of the professionals with commendations such as:

"The health care providers should listen to the patients' problems before examination and prescribing drugs as said by one of the patient's care taker. The health care providers should thoroughly carry out physical examinations on the patients in consultation rooms," said by one of the official of the health center. "There is high case flow after implementations of CBHI," said by a health care provider.

Discussion

This study has revealed that the overall satisfaction level of the clients with the services rendered at Health facilities in Arsi Nagele District is 63.4%. It is higher than reported from study

conducted in Jimma District which showed satisfaction level of 57.1% [23] and lower than the study conducted in Damotwoyde district is located in the Wolaita zone which showed 98.2% of household heads reported that they were happy with the permitted healthcare institutions quality [10]. The difference might be attributed to the fact that this study was conducted in health facilities where there is relatively adequate number of health professionals and better diagnostic facilities may exist and also where CBHI is fully implemented and the other lower result can be due to study place which reduce remembering risk as it conduct in facility. In addition, study time and design might have also contribution to this discrepancy. The overall high satisfaction rate in this study may help and encourage to scale up of the CBHI scheme and service quality in rural part of Ethiopia as there is evidence that CBHI increases healthcare utilization coverage [4].

In this study, age was significantly associated with CBHI satisfaction. Patients who aged 15-24 years were less likely to satisfy with service compared to those above 45 years. A study conducted in Nigeria revealed that older clients were more satisfied with service provision than younger clients [24]. Similarly, a study conducted in Ethiopia clients' satisfaction on national health insurance showed that there was a significant relationship between gender, marital status, education level, and occupation [25].

The study revealed that lack of drugs and supplies in the health center pharmacies was the major problem, to get prescribed drugs. only 23.1% of the clients get prescribed drugs accordingly, which is lower than the study conducted in one of the pilot district Southern Ethiopia with its satisfaction level 96.4% [10]. However, our finding is in line with the study conducted in the hospitals of the Amhara region where about 33% of the clients did not get the prescribed drugs from the facilities [26-28].

This study indicated that twenty percent of the clients were dissatisfied with the provision of information to services. This is quite a low dissatisfaction rate when compared to the study conducted in Tigray zonal hospitals with 46.7% dissatisfaction rate [29]. The reason for this discrepancy could be due to the difference in the number and type of health care providers in service delivery places. 82.7% satisfaction rate is reported regarding to the way the health care providers examining the clients during the service providing. similar finding is prone in the study conducted in Ghana which insured patients are satisfied with the overall quality of care with waiting time, friendliness of staff and satisfaction of the consultation process [30] and higher than the study conducted in Turkey were 53.6% satisfied by humaneness of health care provider [31]. Then in Burkina Faso CBHI members' has poor perception on their healthcare provider which become an important reason for dropping out of the Nouna Community Based Insurance scheme too [32]. The variation may be due to health professionals at different level are expected to demonstrate the standard way of patient examination.

Similar study conducted in south Wollo Zone Tehuledere district has similar finding with the qualitative finding of this study in the following variable : CBHI introduction increased overall quality of health services especially, laboratory services, referral system and

cleanness of the facilities and in contrary as PHCUMs explanation; CBHI brings high utilization or patient in flow brings low quality of services and brings long waiting time, drug shortage and miss treatment as professionals shortage is the main fissure [33].

The qualitative finding of this study also found that CBHI process, reimbursement and drug availability, service quality particularly with respect to CBHI office opening times, the membership card collection process, waiting time and corruption (management) were significantly associated with CBHI satisfaction as the study conduct on Kenya's Kilifi [34-37]. key informants response both in this study and in other study conduct in east Gojjam Zone, Aneded woreda reveal that providing quality health service is the one purpose of the scheme, nonetheless it is not achieved specially in terms of quality, drugs, equipment, skilful health service delivery professionals [5]. From this the investigator concludes that absence of quality health service at health center has its own contribution for poor satisfaction of CBHI members.

Conclusion

The level of satisfaction among CBHI client was low 63.4% compared to the national as more than 80% of the CBHI members were satisfied or very satisfied by the diagnosis, the cleanliness of the facility, and the courtesy of the staff (EHIA, 2015). Thus age, laboratory services, service provider friendliness, access of drug

and waiting time to receive were the main predictors of CBHI members' poor satisfaction in this study, so concerned bodies should improve health service coverage.

Competing Interests

The authors have declared that no competing interests.

Data Availability

The data will be available upon request.

Funding

This study has no specific fund.

Author's Contributions

GF, AYM, ATW and TEW developed the concept and method, collects data and drafts the manuscript, analyzed and interprets the data.

Acknowledgments

We are grateful to Madda Walabu University for supporting this study. We are also very grateful to mothers and data collectors to undertake this study.

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