



## Analyzing Barriers to Accessing Health Care Services in Holeta Town, Ethiopia

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### Abstract

**Introduction:** In Ethiopia, visit to health care services remains low and unevenly distributed. To ensure appropriate health care use, it is necessary to understand factors affecting health care use, and the reasons for low levels of visit to health care service.

**Objective:** The objective of this study was to identify barriers to health care services for the people of the Oromia Region, Ethiopia.

**Method:** A cross sectional survey was conducted from 23 September to 31 November, 2013 in Holeta Town. All eight kebeles were included in the study. 1,422 households were selected using systematic random sampling. Descriptive and bivariate analyses were conducted using SPSS window version 20.

**Result:** Based on the result, 60.1% respondent are used to visit for the health care service. The majority of the respondents (52.0%) mentioned health status is excellent according to self-perceived health status. 92.4% respondents were not included in the medical insurance scheme. As a result, the majority were sick because they are not aware of health problems and they can't afford the medication cost.

**Conclusion:** The major barrier to accessing the health care service includes income, marital status, ethnicity, evaluated health and individual attitude towards health services. Most of the respondents reported that their self-perceived health rate is excellent. Respondent also worry that the health care providers may provide unnecessary care to make money.

**Keywords:** Health care service; Barrier; Access; Holeta town; Ethiopia

### Background

The world health organization (WHO) formalized its commitment to primary Health Care (PHC) in 1978, when it was identified as central to the achievement of the goal of "Health for All by the year 2000" and as a key instrument for improving health throughout the world [1]. In the decades following Alma Ata, many low- and middle-income countries have undergone dramatic changes, including democratization, economic liberalization in an increasingly globalized world, redefining the role of the state, and reforming their health and social service systems [2]. In many high-income countries, various attributes of primary care have been shown to exert a positive influence on health costs, appropriateness of care, and outcomes for most of the major health indicators [3]. A strong primary care promotion has better and more equitable health outcomes than those systems that promote specialty care [4]. Also, there is debate about how effective PHC has been in improving health in low- and middle-income countries [5].

A general consensus is emerging in the field of health care quality assurance (QA) that the concern for the quality of health services should not be limited to clinical effectiveness or economic efficiency but rather should include social acceptability as an important quality objective. Indeed Donabedian had suggested that patient satisfaction is a major quality outcome in itself [6]. Patient satisfaction surveys have a long history in the assessment of consultations and patterns of communications [7,8] and are amongst the best means of assessing the interpersonal aspects of care [6].

Knowledge and understanding of health service usage are necessary for the health resource allocation and planning [9]. Good health

system management and planning depends on informed decisions [10], and informed decisions can be made through an examination of utilization patterns from current health facilities. Unfortunately, health service planning and policy decisions are often made without a clear understanding of the characteristics of current utilization, particularly in rural parts of the developing world where few studies have been completed. The lack of understanding of the current and past utilization often hinders improvement of future primary health care delivery in these remote rural parts.

Utilization of health care services is an important public health and policy issue in developing countries. However, the level of health care services is not satisfactory in many countries [11]. In Ethiopia, the health care system is decentralized and free health service is being delivered for those who cannot afford it. Ethiopia is registering impressive successes in extending affordable primary health care services across the country. Through the Health Extension Programme (HEP), the government has worked to fill gaps in access to care throughout its extensive and often

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hard to reach rural communities by recruiting and training women as paid frontline health workers. These women, recruited from the local communities, complete a 1-year training course, which includes fieldwork, before taking up their posts. They train families on hygiene and other public health practices, and deliver a defined package of basic services.

The HEP sought to deploy two salaried health extension workers at each village health post aiming at training 30,000 Health Extension Workers (HEW). Since its introduction, the HEP has surpassed its HEW target and has contributed significantly to the improvement of health outcomes. The HEP has yielded an increase in the proportion of women who have utilized family planning, antenatal care, and HIV testing. Coverage of publicly-funded health care has risen from 61% in 2003 to 87% in 2007, whereas total coverage-including services provided by private health facilities-has grown from 70% to 98% over the same period [12]. Though health service coverage is 86.7% in Ethiopia, availability of free service for the poor remains very low (32%) and unevenly distributed [13]. In a study undertaken in Amhara region of Ethiopia, 995 (5.6%) respondents were sick for over the two weeks period preceding the survey and only 38.7% of them visited health institutions [14]. This study revealed that about 61.6% of the women give birth in the health institutions. Parity, literacy status of women, average monthly family income, media exposure, decision of place of birth, perception of distance to health institutions (HI) and ANC attendance were found to be significantly associated ( $P < 0.05$ ) with delivery care (DC) attendance [15].

Only few studies have been conducted in Ethiopia to evaluate the factor affecting utilization of health care services. The previous studies reported only the single factor of health service utilization such as economic status [16,17] or cultural practice [18] Therefore, this study used a holistic approach to find out the barrier, and barriers to accessing the health care service in Holeta, Ethiopia were identified.

## Methodology

### Study area and setting

The study area (HoletaTown) is situated in the West Showa Zone of Oromia regional state, 34 kilometers west of Addis Ababa, the capital city of Ethiopia. The town is among one of the special zones surrounding Addis Ababa.

The town is generally characterized by Dega (Cool zone) climate. It is the larger of the two towns in Walmara Woreda. Administratively, the town is subdivided into eight kebeles. Based on the information obtained from Woreda health office 2013 the total population of Holeta town is estimated to be 32,595. The population of Holeta obtains health services through one government owned health center, health posts and private clinics.

A cross-sectional study design that employed quantitative data collection methods were used to identify the barrier to the health care using in the study area. The study subjects were sample of all residents of Holeta Town.

### Types and sources of data

Both primary and secondary data were used in this study. Primary data were collected using household survey, whereas secondary data were extracted from various published and unpublished documents, such as official reports, articles and books. Both quantitative and qualitative types of dataset were used in the analysis.

Face to face interview was conducted by using a structured questionnaire. The questionnaire includes the information on demographic, socio-economic characteristics, used health care service and opinion and attitude on health care services.

### Sampling procedure

The reference population for the survey was all households in each Kebele. The study employed systematic random sampling scheme. All of the total eight kebeles in the town, namely: Goro keresa, Burka Wolmera, Mede Gudina, Goro keresa, Burka Harbu, Birbilsa Siba, Gelgel Kuyu, Sadamo and Tullu Harbu were included in the samples. The allocated sample size for each kebeles was obtained using probability proportional to the size of households found in each kebeles. From all the eight kebeles, a total of 1,422 samples were selected. The samples allocated as Goro keresa 334, Burka Wolmera 339, Mede Gudina 39, Burka Harbu 339, Birbilsa Siba 296, Gelgel Kuyu 66, Sadamo 38 and Tullu Harbu 27. For all kebeles, after selecting a random starting point, the next eligible individual in the household were interviewed every 2<sup>nd</sup> house which was fairly proportional to household size in each kebele.

### Data collection tools

The structured questionnaire includes the information on demography, socioeconomic characteristics and information related to health service etc. The questionnaire was adopted from related works after reviewing relevant literature. The questions were grouped and arranged according to the particular that they can address. After extensive revision, the final version of the English questionnaire was developed. The English version of the questionnaire was translated to Oromifa language, the local language of the Ethiopia.

Four groups of enumerators, who had completed grade ten and fluent speaker of both local and Amharic language and familiar with the study area, were selected. Eight supervisors were assigning for the reliability examination. The supervisor was familiar with the population and social administration settings of the selected kebeles. The supervisors examined the activities of each data collector by walking with them in each kebeles and sometime randomly checked households to ensure reliability of the data. Prior to data collection, enumerators and supervisors were trained to make them familiar with data collection tools and approaches.

The pilot survey was carried to assess clarity, understandability, completeness of questions. The interviewers, supervisors and the principal investigator then discussed the results. Based on the feedback obtained from the pilot survey, the questionnaires were improved.

Questionnaires were administered to the eligible respondents. If the interview were not ended at the first visit, appointment dates and hours was taken by discussion with respondents. A maximum of two more visits was made if an eligible respondent was not at home during questionnaire survey.

### Data quality assurance

The quality of data was assured by properly designing and pre-testing of the questionnaire, providing proper training to the interviewers and supervisors on data collection procedures, and properly categorizing and coding of the questionnaire. During the survey, the computed questionnaires were reviewed and checked for completeness and relevance by the supervisors and principal investigator and the necessary feedback were offered to enumerators before the actual procedure.

## Statistical analysis

The data were analyzed using SPSS version 20 software. Data cleaning was executed by using frequencies and cross tabulations to check accuracy, outliers, consistencies, and missing values.

## Ethical considerations

The survey was commenced after obtaining written consent from Holeta health bureau and district council. Also Survey was reviewed by Institutional Review Board, Yonsei University, Wonju, Korea (1041849-201401-BM-001-02). Verbal consent was obtained for each study subjects. Each respondent was informed about the objective of the study and assurance of confidentiality. Their names were not recorded. They were requested to be included in the study, but told that it is their right to participate or not.

## Result

### Background characteristics of the study population

**Demographic and socio-economic characteristics of the respondents:** A total of 1,422 study subjects responded to the study, of these 815 (57.3%) were female and the rest were male. From the total, equal percentage of male and female (60%) use to visit health centers. The age group 30- 59 year, 762 (53.6%) were identified in our study and this age group are the highest percentage use to visit health center 472 (61.9%). People with Oromo ethnicity are in highest 998 (70.2%) line in the study area and 61.2% are used to visit the health center. 1,011 (71.1%) are married and 654 (68.8%) use to visit the health center. 566 (53.2%) are the majority of the people who were educated by secondary and above level and among them among them 338 (59.7%) are used to visit the health center. Employment status found that 852 (80.8%) were employees and among them 61.6% is used to visit the health center. However, 708 (49.8%) respondent monthly income is up to 500 Birr (Table 1).

**Self-perceived health status and health care seeking practice:** Out of all the respondents included in the study, 676 (47.5%) reported they usually go to the health center for medical intervention, 13.6% to private clinic, 1.5% to health post while 227 (16.0%) reported they never went to health facility and 30 (2.0%) reported they went to traditional healers. Regarding the self-perceived health status, the majority 52.0% reported that their health status is excellent, 29.8% reported that their health status is good and only 3.4% reported that their health status is poor. Most respondents (668) reported they seek a medical treatment in the first day when they become ill while 15.3% reported they seek medical treatment after 30 days. 44.3% reported they heard about the health extension workers whereas the rest 55.7% did not heard about health extension workers. 32.8% reported that they can meet health extension workers when they need health service while 67.2% reported they did not. 75.3% reported that the distance from home to health center is less than 30 minutes. Majority 92.4% of the respondents reported that they or any household member have not been included to a medical insurance scheme or sick fund (Table 2).

**Reasons of visiting health centers:** Among reasons identified which led participants to visit health centers includes treatment 435(27.0%), health education 291(18.1%), medication 255(15.9%), family planning 203(12.6%), basic check-up 165(10.3%), ANC/PNC 95(5.9%), diagnosis 90(5.6%), delivery services 50 (3.1%) and other reasons 22(1.5%) (Figure 1).

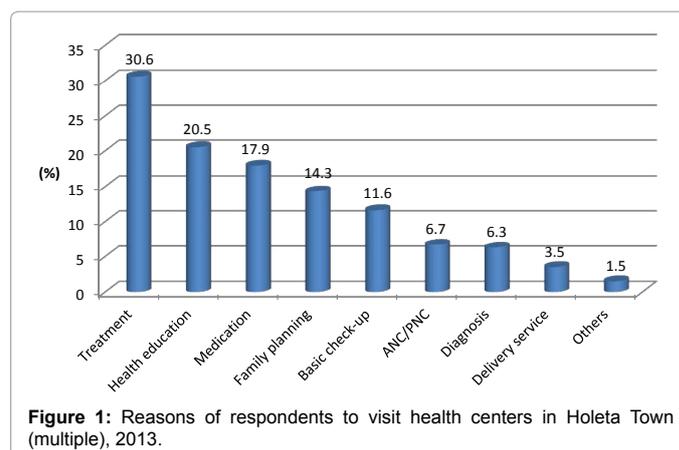
**Reported health service obtained from the health extension workers:** The majority of the respondents reported the service that

Characteristics	Percentile distribution	Yes (%)	No (%)	Total (%)
<b>Sex (n=1,422)</b>				
Male	42.7	364(60.0)	243(40.0)	607(100.0)
Female	57.3	490(60.1)	325(39.9)	815(100.0)
<b>Age (n=1,422)</b>				
15-29	33.8	274(57.0)	207(43.0)	481(100.0)
30-59	53.6	472(61.9)	290(38.1)	762(100.0)
60 and above	12.6	108(60.3)	71(39.7)	179(100.0)
<b>Ethnicity (n=1,422)</b>				
Oromo	70.2	621(61.2)	382(38.8)	1,003(100.0)
Amhara	20.5	179(61.5)	112(38.5)	291(100.0)
Tigray	1.3	12(66.7)	6(33.3)	18(100.0)
Gurage	7.2	46(44.7)	57(55.3)	103(100.0)
Others	0.8	6(50.0)	6(50.0)	12(100.0)
<b>Marital status (n=1,422)</b>				
Married	71.1	654(68.8)	357(36.2)	1,011(100.0)
Living with partner	6.6	44(47.3)	49(52.7)	93(100.0)
Widowed	5.8	43(51.8)	40(48.2)	83(100.0)
Divorced	2.8	21(52.5)	19(47.5)	40(100.0)
Single	13.7	101(51.8)	94(48.2)	195(100.0)
<b>Level of education (n=1,064)</b>				
No schooling	16.0	110(64.7)	60(35.3)	170(100.0)
Primary	30.8	196(59.8)	132(40.2)	328(100.0)
Secondary and above	53.2	338(59.7)	228(40.3)	566(100.0)
<b>Employment status (n=1,064)</b>				
Employed	80.0	524(61.6)	328(38.4)	852(100.0)
Unemployed	20.0	125(59.2)	87(40.8)	212(100.0)
<b>Monthly income(n=1,422)</b>				
500 and below	49.8	317(44.8)	391(55.2)	708(100.0)
501-1000	23.3	116(35.0)	216(65.0)	332(100.0)
1000 and above	26.9	135(35.3)	247(64.7)	382(100.0)

Source: Author's Field Survey, 2013.

Note: 500 Birr = 24.20 US\$ (2015 currency exchange rate)

**Table 1:** The relationship between socioeconomic characteristics and visit to health center.



**Figure 1:** Reasons of respondents to visit health centers in Holeta Town (multiple), 2013.

they get from the health extension workers includes 44.2% referral, 38.6 diagnosis, 26.7% medication, 12.3% treatment, 3.7% don't know, 3.2% family planning, 2.2% basic check-up and 1.7% health education (Figure 2).

**Main reasons why household doesn't have a medical insurance scheme or sick fund:** As it is shown in the figure the main reason for not having the medical insurance scheme or sick fund includes, 392 (27.6%) reported they don't know about medical schemes, 301 (21.2%)

Variable	Frequency	Percent
<b>Self perceived health(n=1,422)</b>		
Excellent	739	52.0
Good	424	29.8
Average	210	14.8
Poor	49	3.4
<b>Place of medical intervention(n=1,422)</b>		
Public hospital	193	13.6
Health center	676	47.5
Health post/HEW	21	1.5
Private hospital	75	5.3
Private clinic	193	13.6
Private pharmacy	7	0.5
Traditional healer	30	2.0
Never	227	16.0
<b>Days interval between first symptoms recognized by the patient and first treatment of the disease(n=1,422)</b>		
First day	668	47.0
2-7 days	403	28.3
8-15 days	94	6.6
16-30 days	40	2.8
above 30 days	217	15.3
<b>No. of use of the services of HC in last 12 months(n=1,422)</b>		
At least once	854	60.1
Never	568	39.9
<b>Heard about health extension workers(n=1,422)</b>		
Yes	630	44.3
No	792	55.7
<b>Heard about health development army(n=1,422)</b>		
Yes	83	5.8
No	1,339	94.2
<b>Can you meet Health Extension Workers when you need health service(n=1,422)</b>		
Yes	467	32.8
No	955	67.2
<b>Payment for the health center service (n=769)</b>		
Yes	281	36.5
No	488	63.5
<b>Distance from home to HC (n=769)</b>		
0-30 min	579	75.3
31-60 min	190	24.7
<b>Experience of not seeking health care when got ill and then the illness got worse (n=1,422)</b>		
Yes	150	10.5
No	1,272	89.5
<b>Household member included to a medical insurance scheme or sick fund (n=1,363)</b>		
Yes	57	4.2
No	1,259	92.4
I don't know	47	3.4

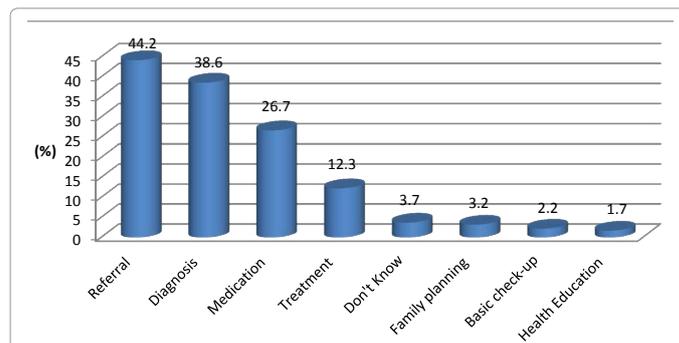
Source: Author's Field Survey, 2013.

**Table 2:** Percentile distribution of self-perceived health status and health care seeking practice in Holeta Town, 2013.

reported they cannot afford it and 158 (11.1%) reported they were not working (Figure 2).

**Respondent's opinion about service provision of health center to sick people:** Among the respondents who visited the health center, 45.2% reported that they give agreement to they worry that the care providers

may provide unnecessary care to make money, whereas 54.8% respondents are agreed for that, the health care providers would only provide the care that they really needed. A 40.2% of the respondents report that the cost of health care is worth paying for the rest 59.8% reported it is too expensive to the service they get. A 67.8% reported medical schemes are expensive and they often won't pay for care that they needed, while 32.2% reported that the medical schemes are expensive, but they know that they will pay for the care they need (Table 3).

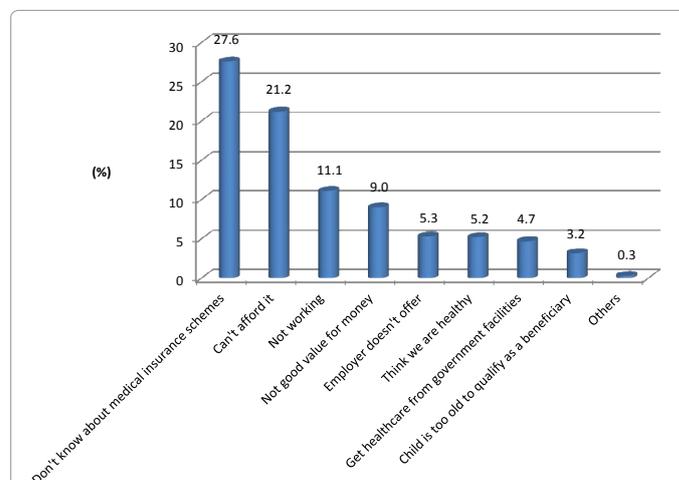


**Figure 2:** Percentage Distribution of reported health service obtained from the health extension workers in Holeta Town, 2013.

S.N.	Opinion	Agree (%)
1.	I worry that health care providers may provide unnecessary care to make money	45.2
2.	I am satisfied that health care providers would only provide the care I really need	54.8
3.	The cost of health care is worth paying for me	40.2
4.	Health care service is too expensive relative to what I get	59.8
5.	Patients are usually treated with respect and dignity at health center/post	46.8
6.	Patients are rarely treated with respect and dignity at health center/post	55.2
7.	Medical schemes are expensive and I often won't pay for care that I need	67.8
8.	Medical schemes are expensive, but I know that I will pay for the care I need	32.2

Source: Author's Field Survey, 2013.

**Table 3:** Public opinion about service provision of health center who are visiting to get treatment in Holeta Town, 2013.



**Figure 3:** Percentage distribution of reasons for household doesn't have medical scheme or sick fund Author's Field Survey, 2013.

S.N.	Opinion	SA(%)	A(%)	D(%)	SD(%)	NR(%)
1	I would agree to pay a small amount each month even if I am not sick now so that if I get sick, health care will be free	33.7	54.9	9.5	1.1	0.8
2	I would be willing to pay the same amount of money each month as everyone else, even though others, who are more sick than me and will use the services more than me	42.3	49.8	5.7	1.4	0.8
3	I would join a publicly supported health insurance scheme if my monthly contribution was less than for current medical aid schemes	36.6	50.8	10.1	1.8	0.7
4	I would join a publicly supported health insurance scheme if I could use public health services for free	45.5	48.2	5.1	0.4	0.8

Source: Author's Field Survey, 2013 (SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, NR=No Response)

**Table 4:** Public opinion about the insurance contribution Holeta Town, 2013.

**Respondent's opinion about the insurance contribution:** Opinion about the insurance contribution of the respondent positive result is found in the study. Respondent has a positive perception of the insurance, where 88.6% respondent are agree to contribute a small amount each month for the future, even if they are not sick now. Similarly, 92.1% respondent agrees to pay each month as everyone else, even though others, who are more sick than them. A 87.4% respondent agree to join a publicly supported health insurance scheme if that will be less than the current medical aid schemes. And consequently 93.7% agree to join a publicly supported health insurance scheme if they could use public health services for free (Table 4).

## Discussion

Ethiopia has improved the health status of the people in the major field like maternal health, child health, nutritional problem, Tuberculosis management, HIV management, etc. However, the progress is slow and there remain many challenges to provide adequate service [19]. The present study attempted to assess barrier to access the health care service in Holeta Town Ethiopia.

The results of the study revealed that 60.1% of respondents visited the health center at least once in the last one year. A considerable number of people 568 (39.9%) did not visit the health center for one year. This value is slightly higher than the reported visit for the Jimma zone of Ethiopia [20]. This visit cover not only for the health seeking but also for the other reasons, for example; to receive family planning services, to get health education, etc. Most of the respondents reported that they usually go to the health center for medical intervention. Most respondents seek a medical treatment when they become ill in the first day while some go to health facility only after becoming ill for more than 30 days. In Ethiopia, Primary health care service is provided by the Health Extension Worker [21]. Also in the Holeta area Health development army are working as a community health worker. The majority of respondents had not heard about health extension workers or health development army, which indicates a promotion of these health service providers and the service they can provide to the society should take place in the study area. A study in Nepal indicates that Female community health volunteer is able to reduce child mortality [22]. Community level workers play a important role to enhance maternal health [23]. Most respondents responded that they or any household member have not been included to a medical scheme or sick fund. The reasons for not being included to a medical scheme or the sick fund are: employer does not offer this service, cannot afford it and do not know about medical insurance schemes.

Moreover, Gurage ethnic group utilized health service lesser compared to Oromo. Similarly, various studies reported associations between ethnicity or nativity and the using the health care services [24-26]. In Canada, visible minorities and Aboriginal people were found to be less likely to report specialist consultations than whites [27], and in the US, blacks were found to consume more physician care than other

ethnic groups [28]. These discrepancies might stem from “sub-cultural” differences among participants of different ethnic origins.

In this study, married participants utilized health center one and half times more than single participants. Similarly, following to the previous studies, marital are more utilizing health service [27,29,30]. In Ethiopia, finding form analysis of EDHS, 2000, identified that, there is a little difference among married and unmarried women on using the health services in all nations, but married women uses health services two-times more than unmarried women in urban areas [25]. Participants who thought that patients are usually treated with respect and dignity at health center utilized the services one and half times more compared to those who thought patients are rarely treated with respect and dignity at health center/post. Similarly, in another study, trust in and familiarities with medical organizations were also significantly associated with the use of health services. The odds of routine health examinations were lower in African American men who reported less trust in medical organizations and who believed that they should keep their concerns and emotions private [31].

Economic status of household is the most associative factor to visit to the health care service [32-34]. Similar results were obtained in the current study. Respondents who had an average monthly family income below 501 birr were less likely to attend than those who had average monthly family incomes above 1000 birr. This might be because for low income people use to visit less to get health care service. Having health insurance was found to have an important influence in increasing the probability of use to visit for health care service [35]. In Senegal and Mali, community health insurance covering maternity costs was associated with increased facility delivery while in Ghana, where the scheme covered only pregnancy complications, the association was not found [36]. A study suggests that, the primary health care approach is the best approach in the world and effective health service mean, user engagement and satisfaction and practitioners skill and competencies and existed service in the facilities [37].

Furthermore, it is hard to indicate that the barrier of the health service utilization because the need of the service may be different according to user. Also, Government's performing in expansion of basic services and efforts to improve both access to and the quality of service are important [38]. It is hard to say that barrier to access are not only financial but also psychological, informational, social, organizational, spatial, temporal and so on [39]. Therefore, a holistic approach is useful for the barrier identification. A study suggests that need to incorporate qualitative and quantitative characteristic and also encompassing both service provider and service user at a time [40].

## Limitation of the Study

Although this research was carefully prepared, there were some imitation; The study only used frequency analysis and did not apply other statistical analysis. Therefore, try to do a sufficient literature review of related the study. The study area is small therefore; the study outcome may not be generalized in other areas.

## Conclusion and Implication

This study showed that use to health care services in the study area remains low. The health service use rate was 60.1% and remaining 39.9% are not using health care service. The major barrier to access the health care service includes income, marital status, ethnicity, health insurance, evaluated health and individual attitude towards health services. The most important factors influencing to use the health care service were demographic and socioeconomic in nature. Moreover, non-attendance of health care service was highest among Guraga ethnic group, whose monthly income was above 1000 birr. Evaluated health, individual attitude on health services and married status were found to have a strong effect on health care service use.

The findings of this study have importance for policy implications. The identification of these factors are associated with utilization of health care services in society. This knowledge now needs to be applied for into the development of adequate interventions that aim to intensify the use of health care service. Based on that the following recommendations were made; community education about health care service use should get particular attention, strengthen promotion of the utilization of PHC, Improvement in family income should be addressed in the long term. Thus, the government and other development partners should design medium and long term plans to increase the income of poor households, and increase the quality of health service delivery especially in public health sectors.

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