# HEALTH SERVICE UTILIZATION AND ASSOCIATED FACTORS AMONG ILL INDIVIDUALS IN GUBA KORICHA DISTRICT, WEST HARAGHE OROMIA REGION, EASTERN ETHIOPIA

**MPH THESIS**

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# HEALTH SERVICE UTILIZATION AND ASSOCIATED FACTORS AMONG ILL INDIVIDUALS IN GUBA KORICHA DISTRICT, WEST HARAGHE, OROMIA REGION, EASTERN ETHIOPIA.

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**APPROVAL SHEET**

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**SCHOOL OF GRADUATE STUDIES**

I hereby certify that I have read and evaluated this thesis entitled Health service utilization and association factor among ill individuals in Guba koricha District, Western Hararghe, Eastern Ethiopia prepared under my guidance by Lema Jiru. I recommend that it be submitted as fulfilling the Thesis requirement.

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Chairperson Signature Date

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Final approval and acceptance of the Thesis is contingent upon the submission of its final copy to the Graduate Studies (CGS) through the candidate's department or school of graduate councils committee (DGC or SGC).

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# BIOGRAPHY

I was born 01/02/1985 G.C in Arsi zone, Bale gasger woreda currently i live in Guba koricha District, West Hararghe .I attend my primary school in bale gasger, and my secondary in Aminya Disrtict and preparatory in Arsi robe dida'a . I graduate from University of Jimaa in Bachelor of Science in Health Education and promotion in 2008 G.C and now work in Guba koricha Woreda Health office as nutrition expert and now attend My MPH at Haramaya University.

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# LIST OF ABREVATION / ACRONOMY

| | |
|---|---|
| ANC | Ante natal care |
| AOR | Adjusted Odd Ratio |
| CBHI | Community Based Health Insurance |
| CI- | Confidence Interval |
| ETB | Ethiopian Birr |
| HEW | Health Extension Worker |
| HH | House Hold |
| HF | Health Facility |
| HI | Health Institution |
| IHRERC | Institutional Health Research Review Ethical Committee |
| OOP | Out of pocket |
| PI | principal Investigator |
| PNC | post-natal care |
| WHO | World Health Organization |
| SPSS | Statistical package of social science |

# ABSTRACT

**Background:** Health service utilization is the outcome of interaction between health professionals and patient or the production of health service by physicians. Health service utilization has an important to disease management and improves the health status of the population as a public health and development issue. Universal health coverage which the World Health Organization advocates as a means to ensuring equity in the use of health services**.** However the health status of Ethiopia is poor, even when related to other low-income countries including those in sub-Saharan Africa. The population suffers from a huge burden of diseases and overall outpatient health care utilization rates remain low and limited existing studies have been seen in Ethiopia.

**Objective:** of this study was to assess utilization of health services and associated factor among ill individuals, in Guba Koricha District, Eastern Ethiopia from March10/2018 to April 20/ 2018

**Method:** community based cross-sectional study design was conducted among 419 households in urban and rural residents of Guba Koricha District from March10/2018 to April 20 /2018. Systematic sampling technique was used to select study participants. Data collection was carried out using structured questionnaires to interview ill individuals. The data were first coded, entered and cleaned using EPi Data statistical software version 3.1 and then exported to SPSS statistical software version 20 for analysis. Odds ratio along with 95%CI were estimated to identify factor associated with health service utilization. Bivariate and multivariate analysis was performed to check associations and control confounding. Variables with p-value < 0.25 during bivariate analysis were entered in to multiple logistic regression models. Level of statistical significance declared at P-value < 0.05.

**Result:** Out of the respondents who had been ill in the previous 4 weeks 67.3%, (95%CI: 61.8- 72.1) visited modern health institution during illness in the study area. Married participants [AOR=2.65, (95%CI: 1.63, 4.3)], literate participants [AOR=7.49, (95%CI: 3.98, 14.10)] and having social supports were found to be associated with health service utilization [AOR=5.87, (95%CI: 2.88, 11.93)].

**Conclusion:** Almost two third of ill individuals visited modern health institutions in the study area. This is moderate health service utilization compared to others study, marital status, educated participants and social support were statistically associated with health service utilization. Strengthening, awareness and social support were recommended in order to increase health service utilization.



**Keywords**. Illness**,** Health status, Health service utilization,

# 1. INRODUCTION

**1.1. Background:** Healthcare utilization has a particular importance as a public health and development issue. People utilize health care services for many reasons, to cure illnesses and health conditions, to prevent or delay future health problems, to reduce pain and increase quality of life (Bernstein et al., 2003)

However, the level of health care services is not satisfactory in many countries of the world, In Ethiopia, the health care system is decentralized and free health service for those who cannot afford is being delivered. The availability of free service for the poor, remains very low (32%) and unevenly distributed in a study undertaken in Amhara region of Ethiopia,5.6%respondents were sick over the two weeks period preceding the survey and only 38.7% of them visited health institutions(Misganawu and Getu ,2003)

In the present study, health-care seeking behavior is measured by the utilization of healthcare services, rather than other ways in which people behave in relation to their health. Moreover it is important to quantify the degree to which individuals who are not well seek care from public health-care facilities, private health-care facilities or traditional healers, or to establish whether they engage in self-treatment from pharmacies. The adherence to the programme could depend on the ways in which individuals engage with the health-care system (Gotsadze *et al.,* 2015)

The capacity of the health system to provide effective services should be strengthened through the availability of adequate skilled manpower, essential equipment, drugs and supplies in health facilities, to meet the needs of the population they serve.(Christopher,2009).The 'poorest' wealth category was to utilize free public health services, Conversely, there are perceptions that public health facilities were perceived to offer low quality care with chronic gaps such as shortages of essential supplies.(Bakeera *et al*., 2009)

Utilization of modern health service decreases with household members increase and utilization of traditional healer's increases with household members increase, households with 0-4 members utilize Government hospitals while 75% of households with more than 14 members less likely utilize modern health care facilities. The main reasons include that it is integral part of every culture, socially acceptable, widest coverage and due to out of pocket expenditure increase and increased distance between residents and health care provider decreases utilization of health care services (Tadele and Birtukan, 2016)

Ill individuals face difficulty in choosing the available health care facilities. The choice of a given provider may be determined by the perceived quality of its service utilization and its referral system in which patients are able to access care at community-based health posts or health centers before accessing higher-levels of care such as secondary and tertiary hospitals. Some communities may depend on and prefer indigenous healers, customs, and knowledgeable family members; however, effective linkages between health posts and health centers and between health centers and hospitals enhance access to services. (Abraham *et al*., 201 5)

According to subjective reporting of ill individual's health care seeking within four weeks recall period and most patients visited health unit within 1-7 days. The four weeks recall period showed an excess report, the excess frequency in urban over rural is due to the number of households that existed in each family in urban is less than the rural family. The reason for seeking traditional healer of ill individual was they were nearby and with short walking distance. Ill individuals visit health service institution after 3 days and these may be explained that ill individuals resorted modern medicine after all possible trials available in their surrounding (Arega, 2005)

## 1.2. Statement of the problem

One billion people lack access to health care systems and nearly one third of the world population couldn't use health services due to different socioeconomic and cultural reasons (WHO, 2000).The health service utilization rate in Africa is low and sub-Saharan Africa in particular is very low ranging from only 0.2 annual visits to 2 visits (Bonfrer et *al*, 2012).The under-utilization of the health services in public sector has been almost a universal phenomenon in developing countries. On the other hand, the private sector has flourished everywhere because government focuses mainly on 'public health goods' such as antenatal care, immunization, and family planning services, treatment for tuberculosis and malaria (Shaikh *et al*., 2004).

People in poor countries tend to have less access to health services than those in better-off countries, and within countries, although a lack of financial resources or information can create barriers to accessing services, the causal relationship between access to health services and poverty also runs in the other direction. When health care is needed but is delayed or not obtained, people's health worsens, which in turn leads to lost income and higher health care costs, (David *et al.*, 2008).

Factors which influence health-care utilization consists of predisposing factors include age, sex, education, ethnicity, religion, occupation, employment, knowledge, attitude and previous experience. Enabling factors, household poverty/income , perceived illness, out of pocket expenditure, availability, affordability and quality of health-care services, travel and medical insurance and need factors ,perceived severity, as well as how they experience symptoms of illness, pain, and worries about their health and magnitude to seek professional help (Andersen, 1995)

The health service approach is focuses on the availability, affordability and adequacy of services as they influence utilization and local illness and treatment perceptions as well as fear and stigma were also identified as barriers in the health seeking process. (Solome, et *al*., 2009).

Lack of health insurance is a barrier to accessing health-care, especially for the poor and other disadvantaged groups study showed that insured individuals are more likely to visit health-care compared to uninsured individuals. (Harris *et al*., 2011)

Perceived factors of that were identified as barriers to utilization of heath indicate that poor education about when to seek care, poverty, perceived high cost of services, inadequacy of available services such as lack of drugs, basic laboratory services, inadequate number of healthcare workers, poor quality

of care, and proximity to the facility among this barriers community perception of poor quality and inadequacy of available services determined largely the level of use of the primary health care services while aware of these services, and having little or no options but to use them, were dissatisfied with identified barriers to effective health delivery in the facility. (Adam and Awunor, 2014)

Efforts to manage the problem July 2011, the Government of Ethiopia launched a pilot Community-Based Health Insurance (CBHI) scheme, with the aim of enhancing access to health care and reducing the burden of OOP expenditure. The scheme, which center to rural households and urban informal sector workers, to raise additional resources for health care and to enhance access (Anagaw *et al*, 2015) .Between 2000 and 2011, Ethiopia rapidly expanded its health-care infrastructure recording an 18-fold increase in the number of health posts and a 7-fold increase in the number of health centers. (Anagaw *et al.,* 2013)

Ethiopia government also developed the Health Sector Development Program (HSDP) to increase access/ coverage to health care and to increase utilization of health service by improve service quality through training and an improved supply of necessary inputs. Strengthen management of health services at federal and regional level, encourage participation of the private sector and the NGO'S sector (FMHO 2010/11 – 2014/15).

However, annual per capita outpatient utilization has increased only marginally. Despite these increases in the supply of health care and increases in the utilization of some specific services, in Ethiopian overall outpatient health care utilization rates remain low and health care utilization per capita per year has increased only marginally (Anagaw *et al.,* 2013).

The population suffers from a huge burden of potentially preventable diseases and some facilities are staffed with health workers of low qualifications, drugs and clinical supplies are not available at many health facilities all of the time having this alarming service gap addressing factors associated with health service utilization has much importance especially in rural areas of the district. Therefore this study contributes to show level of health service utilization by ill individuals and factor associated with health service utilization in rural communities of Guba koricha district.

## 1.3. Significance of the study

The utilization of modern health care in Ethiopia and in sub-Saharan Africa has been limited; this enables policymakers and stakeholders to have more detailed information based on health utilization among households in Ethiopia, for designing behavioral health promotion campaigns focusing more on disadvantaged segments of the population.

Therefore, the results of this study provide useful information and guide to health planners, administrators, policy makers, district health office and health facilities to facilitate conditions for the need to ensure the provision of effective health care services through developing appropriate structures and management capabilities as a platform for effective health care utilization and also contribute in the development of community-level health coverage interventions that target the household members.

## 1.4. Objective of the study

### 1.4.1. General Objective

- To assess health service utilization and associated factors among ill individuals in Guba Koricha District, West Haraghe, Eastern Ethiopia from March10/2018 to April 20 / 2018

### 1.4.2. Specific Objective

- To estimate level of modern health service utilization among ill individuals
- To identify factor associated with modern health service utilization among ill individuals

# 2. LITERATURE REVIEW

## 2.1. Magnitude of modern Health service Utilization

Across-sectional study was conducted among all residents 27,490 aged 18 or over in Gauteng province, South Africa in 2013 indicate that an overall 4.3% respondents did not seek health care, When asked about reasons for not using public health-care services, approximately 77% of participants reported quality of care at public health was poor as the main reason. Around 6.4% reported inaccessibility and 4.6% reported unavailability of public health-care services close to their residence. (Admas *et al,* .2017).

Across-sectional survey using cluster-sample design conducted in Kaloleni district of Kenya 2017 among 829 respondents indicates that Utilization of health services was 77.8% and 76.7% sought healthcare in a health facility, 75.3% of the households reported a sick member in the preceding month, with a median (IQR) of 1 (1–2) members per household. 19.1% household members had a health complaint, 23.3% that did not seek health services during their illness,42.8% self-medicated by buying non-prescription drugs from either shops or pharmacies, 20% did not seek health care from facilities as it was too costly or they did not have money to pay for the service . 9.9% the illness was not serious to visiting a health facility and 8.1% the nearest health facility was too far from them or they did not have transport (Ngugi *et al*., 2017).

Across sectional survey 6$^{th}$ round Health Accounts Household Health Expenditure and Service Utilization conducted among ill individuals within 4 weeks preceding the survey on overall regions of Ethiopia, indicate that, nationally about 53% out of ill individuals visiting a health facility to seek care. and there was significant difference among regions in seeking care for an illness i.e., Amhara39%, Harari 79.5%, Addis Ababa 73.50% ,Afar 70.53%,,Benishangul Gumuz 74.32%, Dire Dawa 59.01%, Gambella 56.81%, Oromia 54.63% SNNPR 59.33% ,Somali 47.50% ,Tigray 49.53%,(FMOH, 2015/16).

A cross sectional Study design conducted in four districts of Jimma zone south west Ethiopia, among 845 households, revealed that health services utilization in the last one year was found to be 45.6% and 48.7% of the respondents had visited any type of health care facility including the traditional medicine in the previous 12 months i.e. Government 35.5% traditional healer 0.7 % a drug vendor 2.4% and private18.5% (Fitsum *et al*., 2011).

Across sectional study design conducted in north east Ethiopia among 420 adults in 2017 indicates that modern health services utilization was 41.8%. The average number of visits for health institution was 1.15 with minimum of 0 and a maximum of 3 visits, regarding illness in the last 12 months before the study conducted 59.1% reported that they encountered one or more acute illness. Among them, 40.7% encountered acute illness only once whereas the rest had encountered two or more times. The major manifestations of study population prior to the study were fever, diarrhea, cough, and headache. (Baize and Adimassie, 2017)

Across sectional survey conducted in sodo zuria woreda, southern Ethiopia among 844 household in 2005 indicate that modern medicine was sought by 79.9% of ill individuals. Residence short 2.138 more utilize health service than long distance Majority of ill individuals, 47.2% sought health service within 1-3 days followed by 39.2% who sought care in 4-7 days of illness among individuals that reported illness private health institutions were visited by 49.4% and public health facilities were visited by 48.6% (Arega, 2005).

Across sectional study conducted among 284 elderly adults in 2015 Bedele Town, Illubabor Zone, Ethiopia indicate that 49.6% have utilized health service whereas 50.4% reported not to have utilized health services preceding the survey .Major reason that hinder those individual who need health care but could not obtain health care service are: financial problems 63.2%, considering that Condition is not serious 16.2%, lack of medical facility and equipment 14.7%, and others 5.9% ,attending spiritual and traditional medicine (Tadele and Birtukan, 2015).

Across sectional study conducted barriers to accessing health care services in Holeta town, Oromiya region among 1,422 households, 60.1% respondent were visit health institution. 52.0% is excellent according to self-perceived health status .The reason for visiting health institution was includes: treatment 27.0%, health education 18.1%, medication 15.9%, family planning 12.6%, basic check-up 10.3%, ANC/PNC 5.9%, diagnosis 5.6%, delivery services 3.1% , and other reasons 1.5%, (Kidist *et al* .,2015).

## 2.2. Factors associated with health services utilization

### 2.2.1. Enabling factor associated with health services utilization.

Across sectional study conducted in four districts of Jimma zone south west Ethiopia among adults indicate that utilization of health service associated with household income ,socio economic status, perceived transport cost ,perceived treatment cost and distance to the nearest health facility were more

likely utilized. Regarding accessibility to health services 34.2% responded that less than an hour to travel to the nearest health facility on foot, moreover the low and medium socioeconomic groups were 2.6 and 3.5 times more likely to visit the health institutions than the high socioeconomic groups. Educational status <=Primary 2.017 more utilize than > Primary while married were 8.1 times more likely to visit the health facilities as compared to unmarried ones (Fitsum *et al*., 2011**).**

Across sectional study conducted barriers to accessing health care services in Holeta town, Oromiya region among 1,422 households, 92.4% respondents were not included in the medical insurance scheme, the main reasons why household doesn't have a medical insurance scheme or ill fund were: 27.6% they don't know about medical schemes, 21.2% may provide unnecessary care to make money, 54.8% are agreed, 40.2% the cost of health care is worth paying for the rest, 59.8 % reported it is too expensive to the service they get, 67.8%, medical schemes are expensive and they often won't pay for care that they needed,(Kidist *et al* .,2015**).**

**2.2.2. Predisposing factor associated with health services utilization.**

Across-sectional study was conducted among all residents 27,490 aged 18 or over in Gauteng province, South Africa in 2013 indicate that as the education level increased, respondents were more likely to seek health-care, respondents who were satisfied with government-provided health-care were more likely to seek health-care. Those with medical insurance visited more frequently than those without any medical insurance (82.1% vs. 8.1%) (Admas *et al,* .2017).

A cross-sectional study factors affecting utilization of health centers in a rural area of Thailand among 206 selected households indicate that occupation, economic status, knowledge and attitude towards health center and quality as well as convenience of health services were found to be associated with health center utilization. (Shresta *et al*., 1994).

A cross sectional health service utilization study conducted in Amhara region among 17,780 people revealed that, the most important reason for not vesting health institution where believed that the disease did not need treatment in health institution 31.9%,Sought drug from vender 27.2%, vesting traditional healer 20.2%, urban residence and educational status of house hold head were significantly related to modern health institution teenager and person above age 60 were less likely visit health institution (Misganawu and Getu , 2003).

**2.2.3 .Socio-demographic factors associated with health services utilization**

A cross-sectional study conducted factors associated with health care service utilization for children with acute childhood illnesses in Nigeria revealed that 30% of the children utilized health service

when they were ill, close to 67% lived in the rural area, 47% mothers age between 15 to 24 years did not have formal education, and with access to media (radio, television or magazine) is 1.8 times more likely to have used healthcare services for acute childhood illnesses (Sulaimon *et al*., 2017)

Across sectional survey conducted in Kaloleni districts of Kenya among 1141 study participants involved 38% of participants reported no schooling, 31% reported primary incomplete, 15% reported completing primary school, and 14% reported secondary or above education and 1% were not sure. Subsistence farming was stated to be the most common occupation 46%, income was obtained from crops 52%, livestock 28%, business and assets 13% ,most of the respondents travel on foot was 61%, while 71% have radio and 8% have telephone **(**Prosser, 2007**).**

Across-sectional study was conducted among all residents 27,490 aged 18 or over in Gauteng province, South Africa in 2013 indicates that males 6.9% were more likely than females, (Admas *et al,* .2017). Across sectional study conducted among 284 elderly adults in 2015 Bedele Town, Illubabor Zone, Ethiopia indicate that ,age below mean 1.127 more utilize health care than above mean and female 1.6 more utilize health care than male (Tadele and Birtukan , 2015).

Study conducted in four districts of Jimma zone south west Ethiopia among adults indicate that utilization of health care Age <5 years were 3.494 more utilize health service than other age group, male were 0.464 less utilize than female. (Fitsum *et al*., 2011**).** A cross sectional study conducted in north east Ethiopia among 420 adults in 2017, the response rate was 97.9%.Female 4.071 times more likely to utilize health services than males. Adults above the poverty line 4.026 times more likely to use the health services than those below the poverty line (Baize and Adimassie, 2017).

Study conducted the health care seeking behavior of the 'Poorest of the Poor' in Addis Ababa,Ethiopia with respect to the decision making who has the power to decide on the treatment alternative to use were: mother 43.5%, and father 31.5%, while 16.1% all member of the household have equal voice and the remaining 5.4%, 2.4%, and 1.2% of the participants revealed brother/sister/ child, the household member who gets ill, and aunt respectively(Addisu & Mengistu ,2014)

**2.2.4. Need factor associated with health services utilization**

A cross sectional Study design conducted in four districts of Jimma zone south west Ethiopia ,among 845 households, revealed those with a poor and very poor perceived health status were 11.7 and 13.1 times more likely to visit the facilities respectively. Respondents who claimed to have disabling health problem and Illness episode were 3.8 times and 10.5 more likely to use the services respectively

Similarly, those who had a history of illness and diagnosed Chronic disease were 10.5 times and 2.3 more likely to visit the health institutions respectively (Fitsum *et al*., 2011).

Across sectional study conducted among 284 elderly adults in 2015 Bedele Town, Illubabor Zone, Ethiopia indicate that , respondents have history of chronic conditions 1.7 more utilize health care than non-chronic case , self-reported health status as moderate 1.6 and poor 1.5 more utilize health than good health status (Tadele and Birtukan , 2015).

A cross sectional study conducted in north east Ethiopia among 420 adults in 2017. Adults who perceived that their health status was poor were 76.923 times more likely to visit the health institution than those who perceived their health status was good; adults with chronic health problem were 4.247 times more likely to use modern health services than those without chronic health problem. (Baize and Adimassie, 2017).

## 2.3. Conceptual framework

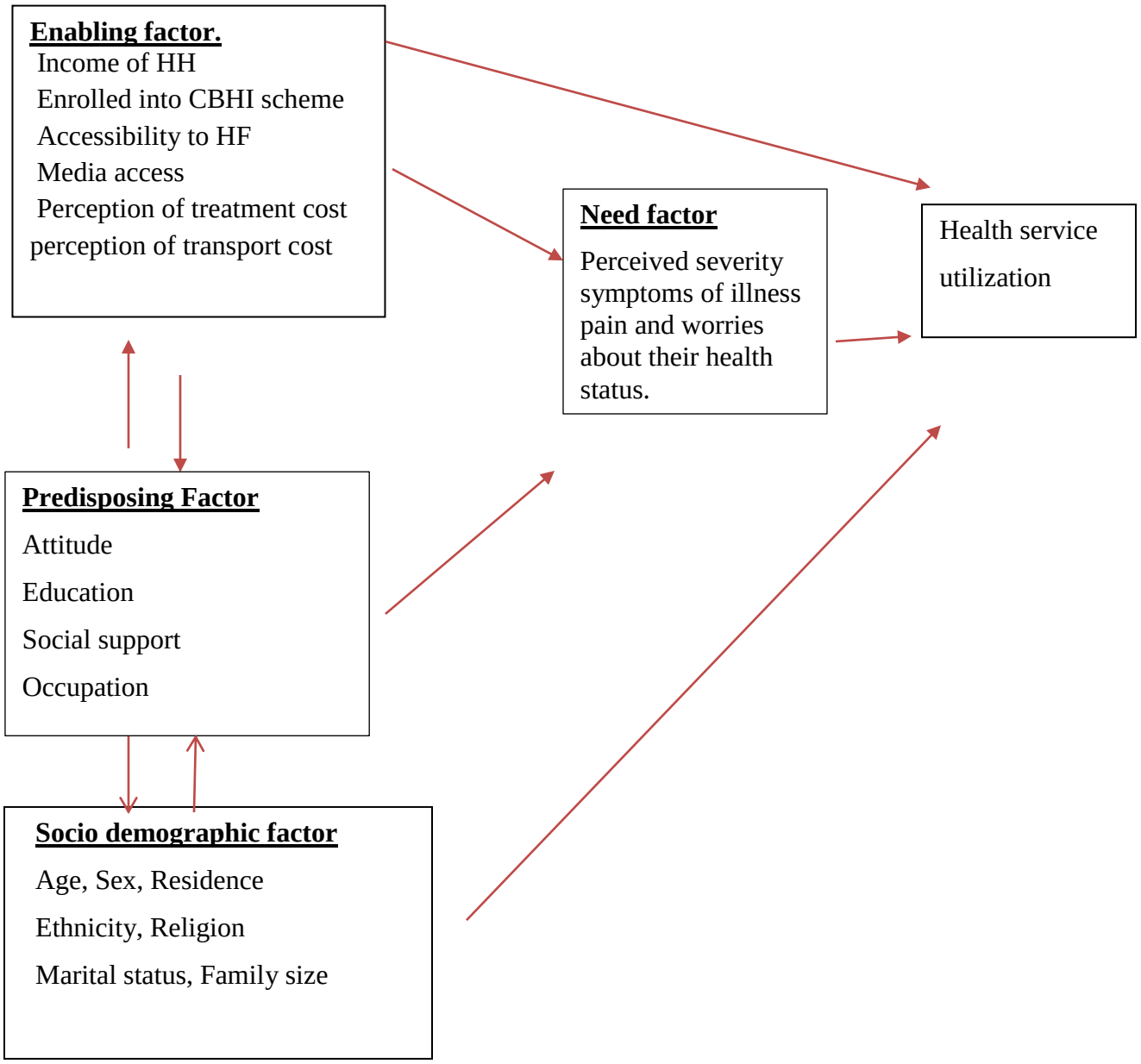


Figure.1: Conceptual framework based on Andersen's behavioral model of health services utilization among study participants in Guba Koricha District**,** West Hararghe Zone, Eastern Ethiopia, 2018 (Andersen, 1995)

# 3. METHODS

## 3.1. Study Area and Period

Guba Koricha is one of the district in the Oromiya Region of Ethiopia and found in the West Hararghe Zone, located 301 Km away from Addis Ababa and 78 Km from zonal capital of chiro town and is bordered on the East by Bordode ,on west by Habro and Ancar on north by Chiro and on the south by Odabultum district.The three largest ethnic groups were Oromo 81.52%,Amhara 11.86% and Argobba 6.16%.all other ethnic groups made up 0.46% of the population. Afan Oromo was spoken as a first language by 80.49% and 19.06% spoke Amharic, the remaining 0.45% spoke all other primary languages reported. The majority of the inhabitants were muslim with 86.11% of the population reporting they practiced that belief, while 12.02% of the population said they professed Ethiopian Orthodox Christianity and 1.8% were Catholic (1994 national census) and have total population 132,399( 2018 woreda base plan) ,5 health center and 22 health post and 5 private primary clinic and 2 drug vender and 2 urban and ,22 rural kebele. The health coverage of the district was 83.3%. This study was conducted from March 10/2018 to April 20/2018.

## 3.2. Study Design

A Cross-sectional study design was used.

## 3.3. Population

### 3.3.1. Source Population*:*

All ill individuals' members of the household residing in Guba koricha District one month prior to study .

### 3.3.2. Study Population*:*

All ill individuals randomly selected members of the house hold in the selected kebele of Guba koricha District

## 3.4. Inclusion and Exclusion criteria

### 3.4.1. Inclusion criteria

All individual who member of the household for at least 6 months and ill prior to the study.

### 3.4.2 .Exclusion criteria

Individuals with illness before one month prior to data collection was excluded

## 3.5. Sample size Determination

### 3.5.1. Sample size determination for the first objective

The sample size was calculated by the formula for a single population proportion. The assumptions would be the sample size calculations were 95% Confidence interval 5% margin of error, and magnitude of sickness modern health services utilization in the last one year 45.6% ( Fitsum *et al*., 2011) and 10% was also added to compensate for non-response rate and other contingencies.,$n$ =($Z\alpha$/2)2× $P(1-P)/(d)$2+ 10% non-response rate. Where $n$ is the required minimum sample size, $P$ is (45.6%)/2, 1.96, 5% (0.05). $n$ = (1.96)2. (0.456×0.544) / (0.05)2=, Then total sample size was 381 + 10% = 419.

### 3.5.2. Sample size Determination for the second objective

Double population proportion formula was used to determine the sample size for the factors associated with modern health service utilization from different literature by using the stat calculation of EPi info statistical software version 7 with the following assumption CI=95% ,power 80%,ratio of un exposed to exposed almost equal to one

Table 2: Sample size calculation factor affecting health service utilization Guba koricha District, West Hararghe Zone, Eastern Ethiopia, 2018

| Variable | Modern Health Services Utilization | | Calculated sample size | Non response rate (10%) | Total sample size | Reference |
|---|---|---|---|---|---|---|
| | Exposed | | | | | |
| Sex | 27.5%(male ) | 45%(Female ) | 258 | 26 | 284 | **(**Fitsum*eta*l.,2011) |
| Residence | 73.4%(rural) | 26.1%(urban) | 72 | 7 | 79 | **(**Arega, 2005) |
| Educational status | 36.7%< =(primary) | 22.3%(> primary) | 340 | 34 | 374 | **(**Fitsum *et al.*,2011 |

Generally sample size was calculated for the first and second objective and the largest sample size is found to be 381 from the first calculation by adding 10% non-response rate the final sample size was 419

## 3.6 .Sampling procedure

Guba koricha district have 22 rural and 2 urban kebeles. First, Rural Kebeles and urban were stratified into rural and urban strata, from each urban and rural stratum out of 24 kebele a total of 5 kebeles (1 from town and 4 from rural) was selected using simple random sampling technique. The sampling considered probability proportion of population size in urban and rural households, to found ill individuals in the selected kebele census survey was done by health Extension worker. When ill individuals found less than the required next kebele were included. The list of the households who have ill member address were available in each Kebele and the list were used as a reference frame to employ systematic random sampling method, when ill individuals were found < 18 yrs., The first choice for the interview was the head of the household who may be the husband or the wife who were available at the time of data collection. When both were available, the husband was interview. When both were not available, the member of the household above the age of 18 years and among them the older was interviewed. When more than one members of the household ill in the study period the last illness was included.

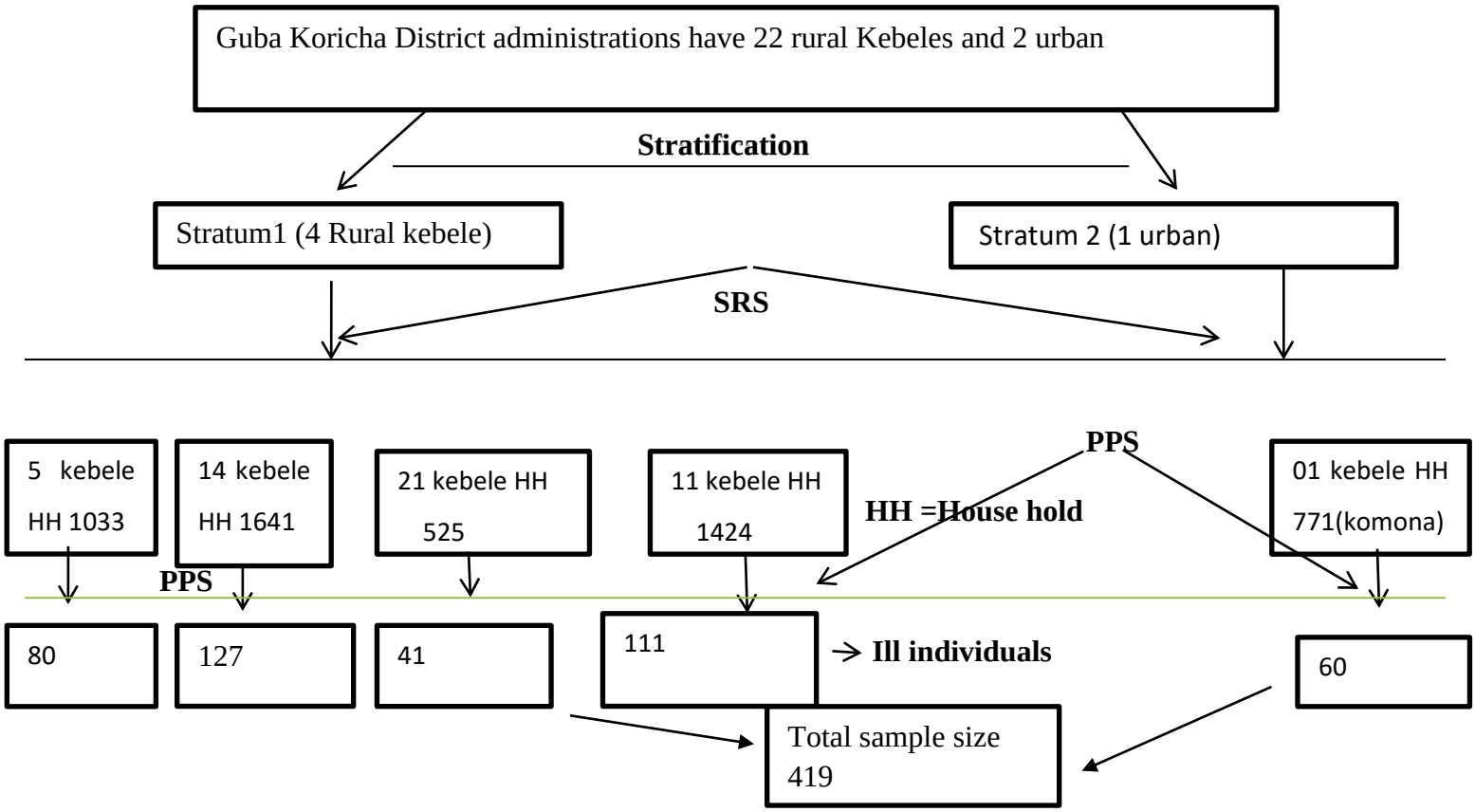


Figure.2.Sampling procedure for households and ill individuals in selected kebeles of Guba koricha district, West Hararghe, eastern part of Ethiopia, 2018.

## 3.7 .Data collection method.

### 3.7.1 Data collection instruments

The data collection was carried out using, structured questionnaires to be filled by data collectors, the questionnaire adapted from World Health Organization Manual for the Household Survey to Measure Access and Use of Medicines and modified from different study, the questionnaire prepared in English and translated to Afan Oromo and re-translated back to English to check the consistence of the instrument. Before undertaking the data collection the instrument was tested taking 5% eligible for the feasibility of the questionnaires to ensure its validity and appropriate adjustments was made before it is finalized. The pre-tested data was not include in the main data.

### 3.7.2. Data collectors

Ten data collectors were recruited for 5 days those have diploma nurse who speaks local language. Close supervision was made by investigator with two BSC nurses that are familiar with the study areas. Before the data collection training for data collectors and supervisors was given about ethics, questionnaires and how to interview the study participants in order to collect full information. The filled questionnaires were submitted on every day basis at the end of the day. Every morning meeting was made with data collectors to solve problems happen during the interview. Daily reviewing of filled questionnaires was made by investigator to minimize the errors created during interview as early as possible.

### 3.7.3 Data collection procedures.

Data was collected using face-to-face interviewer-administered based questionnaire by trained data collectors selected participants by home visits. The interview was administered in a separate place to keep respondent's privacy. The confidentiality of information collected from individuals was kept and explained for the respondents prior to interview. Local guiders were used to show the selected households for data collectors to avoid confusion.

## 3.8. Study Variables

### 3.8.1. The dependent variable

Modern Health service utilization:- The main outcome variable for this study was a binary variable measuring health service utilization if the participant obtained care from public or private health facilities and did not seek care/not utilized if the participant went to a traditional healer, religious,

Home treatment ,Self-treatment or didn't visit any healthcare provider and others (Baize and Adimassie, 2017),and (Admas *et al,* .2017), (Ansah and Powell,2013)

**3.8.2. Independent variables**:

**Enabling factors:** Income, distance, enrolled into CBHI scheme, accessibility, and media access

**Predisposing factors**: attitude, education, occupation, social support perception of ill individuals to ward health service

**Socio demographic factors**: Age, sex, residence ethnicity, religion, marital status, family size.

**Need factors**: Frequency of illness, chronic case, perceived health status, Severity of illness

## 3.9 .Operational Definitions

**Modern health services utilization:-**in this study refers to measure of the health of the ill individuals whether they went to modern health institutions in the last 4 weeks prior to the study for the purpose of curative service. (Baize and Adimassie, 2017), and (Admas *et al,* .2017), (Ansah and Powell, 2013)

**Modern health services:-**Modern health services in this study include public and private health institutions, i.e. Hospitals, health centers, clinics, health post and private non-for-profit Organizations

**Utilization rate** number of outpatient department visits per 10,000 populations per year (WHO (2010)**.**

**Illness**: the subjective response of the patient and of those around him to his being unwell (Arega, 2005)

**Recall period**: This study used an internationally accepted recall period of 4 weeks for outpatient visits, (FMOH, 2015/16)

**Social support:** various types of support i.e. assistance / help that people receive from others (emotional, instrumental, and information support) this means that having access to adequate social support essential to health life (Albrecht and goldsmith, 2003)

## 3.10. Data Quality Control

Two days training was provided to the data collectors and supervisor on the data collection tool and the data collection procedure, Data collectors were supervised closely by the supervisors and the

principal investigator, completeness of each questionnaire were checked by the principal investigator and supervisors on daily basis, double data entry was done by two data clerks and consistence of the entered data were cross checked by comparing the two separately entered data on EPi Data 3.1.

## 3.11. Data processing and analysis

The data were first be coded, entered and cleaned using EPi Data statistical software version 3.1 and then exported to SPSS statistical software version 20 for analysis. Summary of descriptive statistics such as frequencies, percentages, and mean were used to describe socio- demographic characteristics, predisposing, enabling and need factor of study participants.bi-variable analysis, crude odds ratio with 95% CI was used to see the association between each independent variable and the outcome variable by using binary logistic regression model. Independent variables with p-value of < 0.25 were taken in to the multivariable model to control for all possible confounders and the variable were selected by forward stepwise technique.

Multi-collinearity was also checked to see the linear correlation among the independent variables by using standard error and variance inflation factor. The Homer- Lemeshow goodness of fit and Omnibus tests of model coefficients tests with backward stepwise method were used to test for model fitness. Adjusted odd ratios along with 95% confidence interval was estimated to measure the strength of association between dependent and independent variable and thus identify factors associated with health service utilization among ill individuals. In this study level of statistical significance was declared at p-value<0.05.

Descriptive statistical analysis such as simple frequencies, measure of central tendency and measure of variability were done. Then the information presented using frequency, summery measures, table and figure, binary analysis were used to see the association between each independent variable and the outcome variable by using binary logistic Regression. All variable with P –value <0.25 were taken in to the multivariable model to control for all possible confounders and the variable were selected by forward stepwise technique. Odds ratio along with 95%CI were estimated to identify factor affecting health service utilization using multivariable analysis in the multiple logistic regression level of statistical significance were declared at P-value <= 0.05

## 3.12. Ethical considerations

Before starting the data collection ethical clearance was secured by Haramaya University College of Health and Medical Science Institutional Health Research Ethical review Committee (IHRERC).an

official letter was written from Department of Public Health to Guba koricha District Health office for cooperation. Permission to collect data was obtained from district administrative health office and the Kebele leader.

Then, Informed voluntary, written or thumb print consent were required from the respondents prior to the study. Data collectors were explained to the respondents the objective of the study and that the information obtained would be kept confidential and would be used for research purposes only and the risk of being participating in this study was very minimal, but only taking 30 minutes from their time; there would not be any direct payment for participating in this study; the findings obtained from the study is useful for planning intervention programs; and also it would be assured that their participation in the study was volunteer and they had the right to discontinue their participation at any time if they were uncomfortable with the study. Moreover, confidentiality and privacy of participants were maintained throughout the research process.

During data collection when the interviewers found neglected and ill individuals in critical condition, immediately data collectors inform to supervisor and care provision was facilitated by negotiation with the families.

# 4. RESULTS

## 4.1. Socio-demographic characteristics of study participants

A total of 419 samples were included with a response rate of 100 % .Out of this male comprise 193(46.1%) and females were 226(53.9%). The age group 20-39 years had the highest frequency 192 (45.8%), about three forth 324(77.3%) of participants were from rural residence .The vast majority 358(85.4%) of the study participants were Muslims followed by orthodox 55(13.1%). Majority of them belongs Oromo ethnicity 387(92.4%), followed by Amhara 29(6.9%) and Argoba 2 (0.5 %). Majority of house holds 65.6 % have >=5 family members (Table 2).

Table 2: Socio-demographic characteristics of study participants in Guba koricha District, West Hararghe Zone, Eastern Ethiopia, 2018 (n=419)

| **Characteristics** | | **Frequency (No)** | **Percentage (%)** |
|---|---|---|---|
| Age in years | <10 | 77 | 18.4 |
| | 10-19 | 54 | 12.9 |
| | 20-39 | 192 | 45.8 |
| | >40 + | 96 | 22.9 |
| Sex | Male | 193 | 46.1 |
| | Female | 226 | 53.9 |
| Residence area | Rural | 324 | 77.3 |
| | Urban | 95 | 22.7 |
| Ethnicity | Oromo | 387 | 92.4 |
| | Amhara | 29 | 6.9 |
| | Argoba | 2 | 0.5 |
| | Others | 1 | 0.2 |
| Religion | Muslim | 358 | 85.4 |
| | Orthodox | 55 | 13.1 |
| | Protestant | 5 | 1.2 |
| | Others | 1 | 0.2 |
| Marital status | Single | 133 | 31.7 |
| | Married | 252 | 60.2 |
| | Divorced | 8 | 1.9 |
| | Separated | 7 | 1.7 |
| | Widowed | 19 | 4.5 |
| Family size | =<5 | 144 | 34.3 |
| | >5 | 275 | 65.6 |

## 4.2. Enabling factors of study participants

Most of study participants 311(74.2%) their average monthly income were <1000 ETB. About 17.7% study participants were perception of treatment cost were expensive and about half 145(51.4%) travel on foot to nearest health institution. More than half 287(68%) study participants had access to media, and about one third of them 125(29.5%) enrolled in to current health financing reforms, community based health insurance scheme .Concerning accessibility to health services 384 (91.6%) participants claimed that it takes them less than an hour to travel to the nearest health service and 350 (83.5%) of study participants were from < 5km residence nearby health institution.( Table 3).

Table 3: Enabling factor of study participants in Guba koricha District, West Hararghe Zone, Eastern Ethiopia, 2018 (n=419)

| Characteristics | | Frequency (No) | Percentage (%) |
|---|---|---|---|
| Average monthly income | >2000 ETB | 36 | 8.6 |
| | 2000-1000 ETB | 72 | 17.2 |
| | <1000 ETB | 311 | 74.2 |
| Media access | Yes | 287 | 68.5 |
| | No | 132 | 31.5 |
| Being members of CBHI | Yes | 125 | 29.8 |
| | No | 294 | 70.2 |
| Perception of treatment cost | Expensive | 50 | 17.7 |
| | Medium | 64 | 22.7 |
| | Cheap | 81 | 28.7 |
| | Coveredby insurance | 48 | 17 |
| Perception of transport cost | Expensive | 26 | 9.2 |
| | Medium | 64 | 22.7 |
| | Cheap | 47 | 16.7 |
| | No transport | 145 | 51.4 |
| Distance to the nearest health facility | <5KM | 69 | 16.4 |
| | 5-10 KM | 350 | 83.5 |
| Time Required to travel the nearest health facility on foot | <=1 hrs | 384 | 91.6 |
| | >1hrs | 35 | 8.4 |

## 4.3. Predisposing Factors of study participants

About half 195 (46.4%) of study participants have un educated (illiterate) ,61 (14.6%) have social support .About one third (32.7%) of study participants who had been ill in the previous 4 weeks period preceding the study did non vist health institution, the common reason for not visiting the health institution was no money to pay for the health care 31 (22.6%), availability of home treatment 17(12.4%) , believed that illness couldn't be treated at the health institution 21(15.3%), lack of laboratory service14(10.2%) and perceived quality of health institution was poor 12(8.8% (Table 4)

Table 4: Predisposing Factors among study participants in Guba koricha District, West Hararghe Zone, Eastern Ethiopia, 2018 (n=419)

| Characteristics | | Frequency (No) | Percentage (%) |
|---|---|---|---|
| Educational status | No read and write | 195 | 46.5 |
| | Read and write only | 43 | 10.3 |
| | Primary(1-8) | 96 | 22.9 |
| | Secondary | 19 | 4.5 |
| | Underage | 65 | 15.5 |
| | Others | 1 | 0.2 |
| Social support | Yes | 61 | 14.6 |
| | No | 358 | 85.4 |
| Occupational status | Farmer | 248 | 59.2 |
| | Unemployed | 7 | 1.7 |
| | Gv't employee | 48 | 11.5 |
| | Student | 5 | 1.2 |
| | Day worker | 24 | 5.3 |
| | Private employee | 2 | 0.5 |
| | Merchant | 9 | 2.1 |
| | Under age | 74 | 17.7 |
| | Others | 4 | 0.95 |

Table 4 cont.….

| Variable | | Frequency | Present (%) |
|---|---|---|---|
| Major reason of ill individuals not visiting the modern health institutions in the last 4 weeks (n=137) | My illness couldn't be treated at the institution | 21 | 15.3 |
| | Didn't have money to pay for health care | 31 | 22.6 |
| | The perceived quality of health institutions is poor | 12 | 8.8 |
| | The institution is far from me | 14 | 10.2 |
| | Long service time | 10 | 7.3 |
| | Lack of laboratory facilities | 14 | 10.2 |
| | Had taken home treatment | 17 | 12.4 |
| | Bought drugs from drug vendor | 14 | 10.2 |
| | Others | 4 | 2.9 |

## 4.4. Need factors of study participants.

About 256(61.1%) participants reported as they encounter illness once during previous last 4 weeks. Whereas the rest had encountered two and more times. Among them 173 (41.3%) reported sever illness and about one third of them had fair and poor perceived health status (Table 5).

Table.5: Need factor of study participants in Guba Koricha District**,** West Hararghe Zone, Eastern Ethiopia, 2018 (n=419)

| **Characteristics** | | **Frequency (No)** | **Percentage (%)** |
|---|---|---|---|
| Rate health status( self-reported) | very poor | 39 | 9.3 |
| | Poor | 113 | 27.0 |
| | Fair | 167 | 39.9 |
| | Good | 54 | 12.9 |
| | very good | 46 | 11.0 |
| Manifestation of illness | Fever | 81 | 19.3 |
| | Diarrhoea | 92 | 22.0 |
| | Cough | 83 | 19.8 |
| | Headache | 71 | 16.9 |
| | Others | 92 | 22.0 |
| Illness frequency | Once | 256 | 61.1 |
| | Twice | 113 | 27.0 |
| | Three times | 33 | 7.9 |
| | Four times and above | 17 | 4.1 |
| Severity of illness status (self-reported | Severe | 173 | 41.3 |
| | Moderate | 227 | 54.2 |
| | Mild | 19 | 4.5 |
| Presence of any chronic illness | Yes | 41 | 9.8 |
| | No | 378 | 90.2 |

## 4.5. Health service utilization

Out of the respondents who had been ill in the previous 4 weeks period preceding the study only 282 (67.3%) visited to a modern health service for the last episode of illness. The average frequency / mean of visits to the health institutions were found to be 1.66 times. When asked about usual place of health-care services 230 (80.3%) of participants used public health-care facilities (HC, HP and, Hospital) and 52(19.7%) used private health-care facilities. (Table 6)

Table 6: Utilization modern health service among study participants in Guba Koricha District**,** West Hararghe Zone, Eastern Ethiopia, 2018 (n=282)

| **Variable** | | **Frequency** | **Present (%)** |
|---|---|---|---|
| Health service utilization | Yes | 282 | 67.3 |
| | No | 137 | 32.7 |
| Type of health institution Visited | Health centre | 171 | 60.6 |
| | Government Hospital | 20 | 7.1 |
| | Health post | 39 | 13.8 |
| | Private Hospital | 12 | 4.3 |
| | Private clinic | 40 | 14.2 |
| Frequency of modern health service visited | Once | 159 | 56.4 |
| | Twice | 76 | 27 |
| | Three times | 31 | 11 |
| | Four times and above | 16 | 5.7 |

## 4.6. Factors associated with modern health service utilization

### 4.6.1. Results of bivariable analysis

In bivariable analysis: educational status, marital status and had social supports were significantly associated with utilization of health services at P<0.001. Participant's residence area and access to media were significantly associated with utilization of health services at P<0.01, while, sex and age of participants were significantly associated with health services utilization at P<0.05. In addition to

above listed significantly associated factors with utilization of health services, other variables were selected as candidate variables for multivariable analysis at P<0.25 (Table 7)

Table 7: Factors associated with health service utilization_in Guba Koricha district ,West Hararghe Zone, Eastern Ethiopia, 2018 (n=419)

| Variables | | Health service utilization | | COR(95%CI) | P-Value |
|---|---|---|---|---|---|
| | | YES: No (%) | NO: No (%) | | |
| Sex | Male | 140(72.5) | 53(27.5) | 1.56(1.03,2.37)* | 0.035 |
| | Female | 142(62.8) | 84(37.2) | 1 | |
| Residence area | Urban | 75(78.9) | 20(21.1) | 2.22(1.23, 3.65)** | 0.006 |
| | Rural | 207(63.9) | 117(36.1) | 1 | |
| Age category in years | <10 | 56(72.7) | 21(27.3) | 1 | |
| | 10-19 | 44(81.5) | 10(18.5) | 1.65(0.76, 3.86) | 0.24 |
| | 20-39 | 127(66.1) | 65(32.9) | 0.73 (0.41, 1.31) | 0.296 |
| | ≥40 | 55(57.3) | 41(42.3) | 0.53(0.26,0.96)* | 0.037 |
| Educational status | Literate | 145(91.2) | 14(8.9) | 9.30(5.10,16.95)*** | 0.000 |
| | Illiterate | 137(52.7) | 123(47.2) | 1 | |
| Marital status | Married | 162(76.8) | 49(23.2) | 2.42 (1.59,3.70)*** | 0.000 |
| | Others*[a] | 120(57.7) | 88(42.3) | 1 | |
| Family Size | <5 | 100(69.4) | 44(30.6) | 1.16 (0.75, 1.79) | 0.490 |
| | ≥5 | 182(66.2) | 93(33.8) | 1 | |
| Access to media | Yes | 207(72.1) | 80(27.9) | 1.97(1.28, 3.02)** | 0.002 |
| | No | 75(56.8) | 57(43.2) | 1 | |
| Enrolled to CBHI | Yes | 90(72.0) | 35(28.0) | 1.37(0.86, 2.16) | 0.181 |
| | No | 192(65.3) | 102(35.0) | 1 | |
| Had social support | No | 170(57.4) | 126(42.3) | 1 | |
| | Yes | 112(91.1) | 11(8.9) | 7.56(3.90,14.61)*** | 0.000 |
| Rating severity of your illness | Severe | 125(72.3) | 48(27.7) | 1.90(0.72, 5.00) | 0.197 |
| | Moderate | 146(64.3) | 81(35.7) | 1.31(0.72 , 5.00) | 0.577 |
| | Mild | 11(57.9) | 8(42.1) | 1 | |
| Chronic illness (self-reported) | Yes | 31(75.6) | 10(24.4) | 1.57(0.75, 3.30) | 0.233 |
| | No | 251(66.4) | 127(33.6) | 1 | |
| Access to healthcare | Yes | 262(68.2) | 122(32.8) | 1.61(0.80, 3.25) | 0.181 |
| | No | 20(57.1) | 15(42.9) | 1 | |
| Attitude toward Healthcare | Positive | 133(69.3) | 59 (30.7 ) | 1.18(0.78, 1.78) | 0.43 |
| | Negative | 149(65.6) | 78 (34.4 ) | 1 | |

Statistically significant at P<0.001=***and at P<0.05=*, COR=Crude OR and CI

### 4.6.2. Results of multivariable analysis.

In this study, married participants have significantly higher odds of health services utilization by 2.65 compared to others [AOR=2.65(1.63, 4.31) ], prevalence of the odds of health services utilization was 7.49 times higher among literate participants compared to illiterate [AOR=7.49(3.98, 14.10)], and having social supports significantly raised the odds of health services use by 5.87 [AOR=5.87 (2.88, 11.93)] ( Table 8)

Table 8: Factors associated with health service utilization in Guba Koricha district of West Hararghe Zone, Eastern Ethiopia, 2018 (n=419)

| Variable | | Health service utilization | | AOR(95%CI) |
|---|---|---|---|---|
| | | YES: No (%) | NO: No (%) | |
| Sex | Male | 140(72.5) | 53(27.5) | 1.27(0.76,2.13) |
| | Female | 142(62.8) | 84(37.2) | 1 |
| Residence area | Urban | 75(78.9) | 20(21.1) | 1.35(0.67, 2.71) |
| | Rural | 207(63.9) | 117(36.1) | 1 |
| Age category in years | <10 | 56(72.7) | 21(27.3) | 1 |
| | 10-19 | 44(81.5) | 10(18.5) | 0.57(0.24, 1.33) |
| | 20-39 | 127(66.1) | 65(32.9) | 0.64 (0.28, 1.45) |
| | ≥40 | 55(57.3) | 41(42.3) | 0.35(0.12, 1.03) |
| Educational status | Literate | 145(91.2) | 14(8.9) | 7.49(3.98,14.10)** |
| | Illiterate | 137(52.7) | 123(47.2) | * |
| | | | | 1 |
| Marital status | Married | 162(76.8) | 49(23.2) | 2.65(1.63,4.31)*** |
| | Others*[a] | 120(57.7) | 88(42.3) | 1 |
| Access to media | Yes | 207(72.1) | 80(27.9) | 1.16(0.67, 2.02) |
| | No | 75(56.8) | 57(43.2) | 1 |
| Enrolled to CBHI | Yes | 90(72.0) | 35(28.0) | 1.58(0.92, 2.70) |
| | No | 192(65.3) | 102(35.0) | 1 |
| having social support | No | 170(57.4) | 126(42.3) | 1 |
| | Yes | 112(91.1) | 11(8.9) | 5.87(2.88,11.93)** |
| | | | | * |
| Rating severity of illness status | Severe | 125(72.3) | 48(27.7) | 2.96(0.81, 10.82) |
| | Moderate | 146(64.3) | 81(35.7) | 2.39(0.67 , 8.49) |
| | Mild | 11(57.9) | 8(42.1) | 1 |
| Chronic illness (self-reported) | Yes | 31(75.6) | 10(24.4) | 1.68 (0.71, 3.95) |
| | No | 251(66.4) | 127(33.6) | 1 |
| Access to healthcare | Yes | 262(68.2) | 122(32.8) | 2.54(0.98, 6.56) |
| | No | 20(57.1) | 15(42.9) | 1 |

Statistically significant at P<0.001=***and at P<0.05=*AOR=Adjusted OR and CI

# 5. Discussion

Out of the respondents who had been ill in the previous 4 weeks 67.3%, visited modern health institution during illness in the study area. Married participants, literate participants and having social supports were found to be associated with health service utilization.

In this study 67.3%, (95%CI: 61.8- 72.1) of study participants have sought health-care from health institution (either public or private health facilities.) This findgs was higher compared to Ethiopia's 6$^{th}$ round Health Accounts (HA VI) Household Health Expenditure and Service Utilization Survey Nationally 53%, Amhara 39%, DireDawa 59.01%, Gambella 56.81%,Oromia 54.63%, SNNPR 59.33%,Somali47.50%,Tigray 49.53%,consistence with afar70.53%, and lower than Harari,79.5%,and AddisAbaba73.50%. These difference findings might be due to socio economic status in the study area, facility infrastructure, and might be due to recall bias (FMOH, 2015/16.)

This finding was also higher compared to study done in Jimma zone 45.6% (Fitsum *et al*., 2011), Amhara region 38.7% (Misganawu and Getu, 2003) Holeta town 60.1 %( Kidist *et al*., 2015) North east Ethiopia 41.8% (Baize and Adimassie, 2017) and lower than study done in Kenya 77.8 %,( Ngugi *et al*., 2017).and Sodo zuria woreda 79.9%, (Arega, 2005).These difference findings might be due to difference in the years in which the studies were conducted and due to recall bias.

As the need for health care changes with age, gender, and marital status, utilization of health services also changed accordingly. In this study married participants were 2.65 times more likely healthcare services use compared to others; this is similar with study conducted in Jimma zone and Illubabor zone. (Fitsum *et al*., 2011), and (Tadele and Birtukan, 2015), respectively

Predisposing and enabling factors like education and family income have been seen to affect utilization of health services. In this study Prevalence of healthcare services utilization were about 7.49 times significantly higher among literate participants compared to illiterate one, this study is confirmed by study conducted in illubabor Zone (Tadele and Birtukan, 2015), education plays a crucial role in an individual's decision to visit and utilize health-care services, this indicate that positive association between education and health-care utilization

Social support not only helps us cope with challenges it also leads to improved health (Albrecht and goldsmith, 2003) in this study having social supports 5.87 more likely utilize healthcare services than those have not social support .Others study indicate that the effect of social support on an elderly individual's recovery from a hip fracture those who had less social contact and support were five times more likely to die within five years of fracture than those with more social contact and support (Mortimore *et al* ,2008)

The average frequency / mean of visits to the health institutions were found to be 1.7 which is lower by half from the world health standard which is 3 times. (Baize and Adimassie, 2017) and health service utilization rate was 0.34 vist; this findgs was comparable with 0.3 visits in 2011 out patent health service vist in Ethiopia. (Anagaw *et al.,* 2013).

In this study Government healthcare facilities provided the majority of outpatient services where 80.3% which is significant difference with Ethiopian Health Accounts 6$^{th}$ round household health service utilization and expenditure survey was 75%. (FMOH, 2015/16).

Increased health service quality increases the choice of health-care providers relative to either going to traditional healers or others, 8.8% of respondents mentioned poor quality of public health-care services 47.4% use traditional healing service. This indicates the need to improve the quality of public health-care services and the perception towards them.

**Limitations**

This study relied on self-reported health facility utilization, which is subject to recall bias .and self-rating of health status and severity of illness were perception of ill individuals . Utilization of health service is measured by asking where they vist or not during illness which may be biased. Accessibility measured by time taken to near health institution on foot which all individuals not walk the same speed and this study done over all health service utilization during illness specific service and ways of treatment is need further investigation.

# 6. Conclusion and Recommendation

## 6.1. Conclusion

The level of health services utilization was found to be unsatisfactory. Education status, married participants and having social support were found to have a statistically significant association with health service utilization**.**

## 6.2. Recommendations

The results indicated that there is a need to improve health services utilization and perception towards them. Efforts have to be made to increase modern health services utilization

**Guba koricha district health office**

Educating the families and create continues awareness to ward modern health service among population about the importance of modern health service utilization.

Monitoring the achievement of universal health coverage which the WHO advocates as a means to ensuring equity in the use of health services.

**Kebele administrations**

Facilitate social support among the population using community structure about the importance of health service utilization.

**Policymakers and stakeholders**

Designing behavioral health promotion activities (health seeking behavior) among population for modern health service utilization.

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# 8. ANNEXES

## 8.1 .Annex I: Participant information sheet and informed consent form English version

My name is----------. I am working as a data collector for the study being conducted in this kebele by Lema Jiru who is studying his Master's degree at Haramaya University College of Health and Medical Sciences. I kindly request you to lend me your attention to explain you about the study and being selected as the study participant.

**The study/project title:** Modern health service utilization and associated factors among sick individuals in Guba Koricha District, West Haraghe, and Eastern Ethiopia

**Purpose /aim of the study:**

The finding of this study will be used to know level of modern health service utilization and what factors have affect on choosing health service utilization. and to provide useful information and guide to health planners, administrators and policy makers on the need to ensure the provision of effective health care services through developing appropriate structures and management capabilities as a platform for effective utilization. Moreover, the aim of this study is to write a thesis as partial requirements for the fulfillment of master's program in General public Health for the principal investigator.

**Procedure and duration: The** study is structured interview questioner and you are expected to the true answer that you give for us means a lot to achieve the goal of the research. We want to ask you about different things relating to you and your families about health service utilization there are 39 questions and it will take about 30 minutes

**Risks and benefit:** The risk of being participating in this study is very minimal, but only taking your time. There would not be any direct payment for participating in this study. But the findings from this research may reveal important information for the local health planners.

**Confidentiality:** The information you will provide us will be confidential. There will be no information that will identify you in particular. The findings of the study will be general for the study community and will not reflect anything particular of individual persons or housing. No reference will be made in oral or written reports that could link participants to the research directly.

**Rights:** Participation for this study is fully voluntary. You have the right to declare to participate or not in this study. If you decide to participate, you have the right to withdraw from the study at any

time and this will not label you for any loss of benefits which you otherwise are entitled. You do not have to answer any question that you do not want to answer.

**Contact address**: If there are any questions or enquires any time about the study or the procedures, you can contact by using the following addresses.

Principal investigator: Lema Jiru

Email: lema2014jiru@gmail .com

Mobile phone: 0923963947

Haramaya University College of Health and Medical Science Institutional Health Research Ethical review Committee (IHRERC).

Office phone: 0254662011

P.O.Box: 235, Harar

**Declaration of informed voluntary consent:**

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

Name and Signature of participant: _____Name and signature of data collector_____

Date of data collection_____

## 8.2 .Annex II:-English version questionnaire

Kebele _____ kebele code _____Code number _____Supervisor name _____

Date of the interview _____ interviewer name and signature _____ Complete----------

----1 not complete ----------2

**Circle questions that have Choices and write on space provided for others for sick individuals.**

| **Part-1 The Socio-demographic characteristics of sick individual** | | | **Skip** |
|---|---|---|---|
| 101 | Age | _____(year) | |
| 102 | Sex | 1. male<br>2. female | |
| 103 | Place of residence | 1.Rural<br>2.Urban | |
| 104 | Ethnicity | 1. Oromo<br>2. Amhara<br>3. Argoba<br>4.Others_____ | |
| 105 | Religion | 1. Orthodox<br>2. Muslim<br>4. protestant<br>5. Others_____ | |
| 106 | What is your educational status? | 1. Can't read and write<br>2. Can Read and write<br>3 .if educated ,write the grade _____<br>4. Completed above grade 12<br>5. under age<br>6. Other---------- | |
| 107 | What is your occupation? | 1. Farmer<br>2. Un employed*<br>3. Government employee | |

| | | | |
|---|---|---|---|
| | | 4. Student<br>5. Day worker<br>6. Private employee<br>7. Merchant or have own business Organization<br>8. Under age<br>9. If others specify---------- | |
| 108 | What is your marital status? | 1. Single<br>2. Married<br>3. Divorced<br>4. Separated<br>5 .Widowed/widower | |
| 109 | How many people live in your family including you? | _____ | |
| 110 | How much is your family average monthly income/economic status? | _____ | |
| 111 | Do you have any media access in your home? | 0.Yes<br>1.No | If'no'Skip to 113 Q |
| 112 | If your answer for Q 111 is 'yes' which type of media | 1.Radio<br>2.TV<br>3.Newsletter<br>4.Other Specify _____ | |
| 113 | Do you enrolled in to community based health insurance | 0.Yes<br>1.No | If 'yes' Skip to '115' Q |
| 114 | If your answer for Q 113 is No what is the reason | 1.Don't know about medical insures scheme<br>2.The cost of health care worth paying for the rest<br>3.Too expensive the payment of the scheme<br>4. un necessary care to make money | |

| | | | |
|---|---|---|---|
| | | 5.Think we are healthy<br>6. insured and noninsured not treated equally<br>7.Get health care from government facility only<br>8.Otherspecify<br>_____ | |
| 115 | Do you have any social support gained in kind or cash in the family in the last 12 month? | 0. Yes<br>1. No | if'no'Skip to '117 'Q |
| 116 | If your answer for Q 115 is 'yes 'how do you rate the support? | 1.Extesive<br>2.Enough<br>3.Minimal | |
| 117 | What is the relationship of the sick individual with household head? | 1. Wife<br>2. Husband<br>3. Son<br>4. Daughter<br>5. Relative(state)_____<br>6. housemaid<br>99. Other specify_____ | |
| **Part 2 The Health status of the sick individual** | | | |
| 201 | How do you rate your health status? | 1.very poor<br>2.poor<br>3.Fair<br>4.Good<br>5.very good | |
| 202 | Who was the illness detected?(identified) | 1. Self-identified<br>2. Have previous experience<br>3. Household head identified<br>4. Neighbors identified<br>5. Religious leader | |

| | | | |
|---|---|---|---|
| | | 6. Health professional<br>7. Other_____ | |
| 203 | What was a manifestation of your illness? | 1 .Fever<br>2 .Diarrhea<br>3 .Cough<br>4 .Headache<br>5.others | |
| 204 | How many times did you encounter with this or other manifestation? | 1. Once<br>2 .Twice<br>3. Three times<br>4. Four times and above | |
| 205 | How severe your illness was? | 1.Severe<br>2.Moderate<br>3.Mild | |
| 206 | Do you have any other chronic illness? | 0.Yes<br>1.No | If no skip to part 3 ‘’301’’Q |
| 207 | If yes to Q’’206’’ which chronic illness? | 1.Diabetic<br>2.Hypertention<br>3.Asthma<br>4.Cancer<br>5.others | |
| **Part 3 Questions related to access to health institutions** | | | |
| 301 | How far is the health institution from here (in km)? | _____<br>_____ | |
| 302 | How long does it take in hours to reach | | |

| | | | |
|---|---|---|---|
| | there? | _____<br>_____ | |
| **Part 4 Questions related to health care utilization** | | | |
| 401 | Did you visit modern health institutions for the last 4 weeks | 0 .Yes<br>1. No | If no skip to '405' and 408 Q |
| 402 | If your answer for Q '401' is modern health service which specific health institution did get visited? | 1. Health center<br>2. Government Hospital<br>3. Health post<br>4. Private Hospital<br>5. Private clinic | |
| 403 | Who decide to choose modern health institution? | 1.Self-identified<br>2.Husband<br>3.Wife<br>3.Elderly brother /Sister<br>4.Religion leader<br>5.Health extension worker<br>6.Neighbior<br>7.Relatives<br>8. Other specify …… | |
| 404 | If your answer for Q''401 is 'yes' how many times did you visit the health institution? | 1. Once<br>2 .Twice<br>3. Three times<br>4 .Four times and above | |
| 405 | If your answer for 401 is 'No' where did you get treated/visit regularly? | 1. Not treated at all<br>2. Visited a drug vendor<br>3. Home treated<br>4. Religious institutions<br>5. Traditional healing institutions<br>6. If other specify…… | |
| 406 | What is your perception on the | 1. Expensive | |

| | | | |
|---|---|---|---|
| | treatment cost of in the modern health institutions that you visited? | 2. Medium<br>3. Cheap<br>7. 4. Covered by insurance | |
| 407 | What is your perception on the transport cost to reach the modern health institution? | 1 .Expensive<br>2 .Medium<br>3 .Cheap<br>No transport | |
| 408 | If your answer for Q '401' is 'NO' what is your main reason that you didn't visit modern health institutions? | 1.My illness couldn't be treated at the institution<br>2.I didn't have money to pay for health care<br>3.The perceived quality of health institutions is poor<br>4.The institution is far from me<br>5.Long service time<br>6.Lack of laboratory facilities<br>7.I had taken home treatment<br>8.I bought drugs from drug vendor<br>9..Other | |
| .<br>**Pat :5 Attitude of sick individual toward modern health service utilization** | | | |
| 501 | Early treatment (1-2days) from modern health service is necessary before non-modern service (traditional, religion, holy water etc. ) | 1.Strongly disagree, 2.dis agree 3. Neutral 4. Agree, 5. strongly agree | |
| 502 | Traditional medicine was preferred to modern medicine | 1. Strongly disagree, 2.dis agree 3. Neutral 4. Agree, 5. strongly agree | |
| 503 | Health service user (patient satisfaction) influence utilization of health service. | 1. Strongly disagree, 2.dis agree 3. Neutral 4. Agree, 5. strongly agree | |
| 504 | Stigma against some disease playing significant | 1. Strongly disagree, | |

| | | | |
|---|---|---|---|
| | role in delaying health seeking from modern medicine | 2.dis agree 3. Neutral 4. Agree, 5. strongly agree | |
| 505 | Being members of community based health insurance necessary for health service utilization than out of pocket payment. | 1. Strongly disagree, 2.dis agree 3. Neutral 4. Agree, 5. strongly agree | |

Thank you.

## 8.3 .Annex III:-Oromifa version of participant information sheet and informed consent

**Odeeffannoo hirmatotaa irraa walitti qabamuu**

Akkam jirtu ani maqaan Koo obbo _____Jedhama. Sababiin ani iddoo kanatti argamuu danda'eef qorannoo obboo lamma Jiru degri lammaffa issaa saayissii fayya hawassaa waligalaattin (GMPH) yuniversiitii haroomayaa irraa ebifamuuf ragga funanaa ta'eettini.Kanafuu Oddefanno sirii ta'ee akkaa nuu kennitaniifi qorannoo kana kessatti hirmachuukessaaniif gudda issiin galatefana.

**Mata duree qorannoo**: -Hamma itti fayadamaa tajajjilaa dhabbilee fayyaa amaayyaa fi dhimmota issaan midhaanAnaa Gubakoricha, Godina Hararge lixa, NannoOromiya, Baha Ethiopia

**KaayyooQoranicha:** Bu'aan qorannoo kana irraa argamuu Qamaa karoraa fayyaa waligalaa basuuf hogganuuf, Akkasumasgaggesitotaa fayyaa Sadarkaa nanno, Godina, Anaa fi bufataa fayyaa irraa jiraan hamma itti fayyadama tajajjilaa dhabbilee fayyaa ammayyaa fi dhimmota issaan midhaan irraatii oddefanno sirii ta'ee argachuudhaan karoraa bafachuufi hawasni tajajjilaa akkamiitiif dhabile fayyaa filachuu akkaa barbaduu kan addaan baffatanii irraatti hojjetaan ta'a.

**Adeemsa fi yeroo:**-Gaafiwwan qorannoof tahuudandahan kuun si'ii fi matti kee Kan ilaallatu waan ta'eef bifaa gaffi fi deebiittin Kan qophahe dha. Gaaffiiwwan kuun lakofsaan 39 yemuu ta'aan daqiqaa 30 calla hin fudhataan,Kanafuusirritti ergaa dhageftanii booda waan itti amantaniifi sirriidha jettan akka deebiftaan kabajadhaan issiin gafadha.

**Miidhaa fi fayidaa:** -Qorannookana irratti hirmaachuu keessaniin miidhaan issin irra gahu baay'ee xiqadha innis, yeroo gabaabdu issin jalaa fudhatudha. Qorannoo kana kessatti hirmachudhaan mallaqni issini kafalamu hin jiru garuu bu'aan qorannoo kana hawassaa anaa kenyaatiif bu'aa gudda qaba.

**Iciitii;-**Odeefanno issin nuuf kenitaan kuun iccitidhaan Kan egamudha.oddeffanno issin nuuf kenitaan kamiyyuu qamaa biroof hin saxilamuu. Bu'aan qorannoo kana namotaa qo'annoo kana kessatti

hirmataan qofaafi ossoo hin tanee namotaa qorannoo kuun ilaallatu hundaaf olla.gabasni barefamanis ta'ee afaanin hirmatotaa qo'annoo kana kessatti issin saaxilu jirachuu hin qabu.

**Mirga;-**Qorannookana kessatti hirmachuun gutummatti fedhinaraati kan hundayeedha. Hirmachuufi hirmachuu dhisuun mirga hirmatotati.yeroo barbadeeti hirmana kee addaan kutuu dandesaa. Kuun immoo midhaan siraan gahuu hin jiru hirmachudhaan dirqisifamuu hin qabdu

**Karaa itti qunamuu dandesaan-:**

Waa'ee qoranichaa irratti gaafii tahan hunda ykn waan issin yaadessu yoo jiraate teesso armaan gadii kanaan yeroo barbaadanitti argachu ni dandeessu.

Abbaa qorannoo maqaa:-lamma jiru

Email -: lema2014jiru@gmail.com

Lakk. Bilbila Mobila-: 0923963947

Haramaya University

Lakk.wajjira- 0254662011

Lakk.posta- 235, Harar

**Formi hayamaa fi Walii galtee: -**

Waa'ee haala hirmaanna qorannoo erga naaf dubbifame booda kaayyooqorannoo, bu'aan qoranna, miidhaan qorqnno qabu, haalli eegumsa iciitin, mirgihirmaachuu fi hirmachu dhiisuu fi karaa qunamtii odefannoo naaf ibsame jira. Gaafii yoon qabaadhe gaafachuuf carraan naaf kenname jira, gidduttis dhiisu yoon barbaade yeroon barbaadetti hirmaachu dhiisu akka dandahu gatii deebisuu Kan hin barbaachifne tahuu mirga guutu akkaan qabu ergaan hubadhee booda fedhinnaa guutuun qorannoo kana irratti hirmaachuu kaniin murtesse tahu kiyya maqaa fi Mallattoo kiyyaanin mirkaneessa.

Maqaa fi mallattoo odefanno kennaa:

Maqaa_____ Mallattoo_____ Guyyaa_____

Maqaa fi mallattoo odefanno sassaaba

Maqaa_____ Mallattoo_____ Guyyaa_____

## 8.4 .Annex IV: - Afan Oromo Version Questionnaire

Gaffillee Qorannoo Afan Oromottin Qophaa'aan Maqa Araadaa _____

Lakofsaa koodi Aradaa _____ Lakofsaa koodi gaffi kana _____ maqaa supervisera _____Guyyaa raggaan kun itti funanamee _____ maqaa fi mallattoo ragaa funannaa_____/_____

Raggaa hundi gutamee yoo ta'e --------1 Raggaan hundi gutu hin tanne yoo ta'e -------2

Gaaffii waan kuun namaa ji'aa kana kessaatti dhukubsatee Kan gafatamuufi gaffii filannoo qabuuf itti marii Kan hin qabneef bakka duwwaa irratti guuti.

| Kutaa-1 Gaffannoo haala qabatamaa raggaa dhukubsataa kan gutamuu dha. | | |
|---|---|---|
| 101 | Umrii kee meeqa? | _____(waggaan) |
| 102 | Saala | 1. Dhiraa 2. Dubarti |
| 103 | Iddoo Jireenya kee essaa? | 1. Baadiyyaa 2. Maggalaa |
| 104 | Sabumaa | 1. Oromo 2. Amaraa 3. Argoba 4. Kan biro barresi _____ |
| 105 | Amantaa kee maali? | 1. Ortodoksii 2. Muslimaa 3.Pirotestaantii 4. Kaatolikii 5. kan biro barresi _____ |
| 106 | Sadarkaa barnootaa keetti meqaa? | 1. kan barreessu fi dubbisuu hin dandeenye 2. kan barreessu fi dubbisuu danda'u 3. kan barate /ttee yoo ta'e kutaa issa baressi____ 4. kutaa 12 ol 5. Umriin kan barumsaaf hin genyee 6. kan biroo bareessi _____ |
| 107 | Gosa hojii keetti maali? | 1. Qonnaan bullaa 2. Kan hin qacaramne 3 .Barataa 4. Hojjataa guyyaa/Dafqaan bulaa 5. Hojjataa mootummaa 6 .Hojjaata dhunfaa 7. Daldaala 8. Umriin issa kan hojjiif hin geenye 9. Kan biro bareessi _____ |
| 108 | Haala gaa'ilaa keetti? | 1. kan hin funee 2. Kan fudhee / waliin jirata jiraan 3. kan wal hiikaan 6. kan Adda bahaan 6. Kan irraa du'e/dute |

| | | |
|---|---|---|
| 109 | Maatii keessan keessa sii dabalatee nama meeqatu jirata? | _____ |
| 110 | Galiin maatii keessan ji'an giddu galeessan meeqa ta'a? | _____ |
| 111 | Meeshaa walqunamtti oddefanno irraa argattan mana keessan keessaa qabduyi? | 0. Eyyee 1.Lakki |
| 112 | Deebiin keessan gaffii'' 111'' eyyee'' yoo ta'ee Gossaa kami fayadamtuu | 1. Radio 2.Televisioni 3. Gazexaa<br>4. kan biro yoo jiratee ibsi _____ |
| 113 | Inshuraansii fayyaa hawassaa misensaa tattani jirtu? | 0. Eyyee 2. Lakki |
| 114 | Deebii kee gaffii 113 irraatii lakkii yoo ta'ee sababani issaa maalii? | 1. Hubannoo waa'ee inshurasii dhabuu<br>2. Namotaa biro dhkubstaan ittin tajajjilaa waan argataniif bu'a annaf fi maatti kootiif hin qabu<br>3. kafalttiin dhabata kanaaf kafalamu qaalii ta'uu<br>4. kan misesaa inshurasii ta'ee fi hin tanne walqixaa wal 'dhanaamuu dhabuu<br>5.hin dhukubsanuu jedhaani yaduu<br>5. kan misesaa inshurassi ta'ee fi hin tanne walqixaa tajajjilaa hin argataan jedhaanii yaduu<br>6.Maallaqa argachuuf jechaa yaalii sirii hin tanne gaggessu<br>7. Misensi inshurassi tajajjilaa kan argatuu bufataa motumma qofaa irraa waan ta'eef<br>8. kaan biro ibsi _____ |
| 115 | Deegarsaa hawasumaa bifa qarshittin ykn akkakutiin ji'otaan 12 darban keessaa | 0. Eyyee 1. Lakki |

| | | |
|---|---|---|
| | argatanituu? | |
| 116 | Debbin gaffii '115' eyyee yoo ta'ee akammin tilmamta? | 1. Bayee gudda 2. Gahaa 3.Xiqaa |
| 117 | Firoomni dhukubsataa abba warratiif maal ta'a? | 1. Hadhaa manaa 2. Abbaa warraa 3.Ilmaa 4.Intallaa 5.Firaa biro yoo ta'ee ibsi _____ 6.Gargaraa 99..Kan biro ibsi _____ |
| **Kutaa 2 Gaffannoo Haala qabatamaa raggaa misensaa mattii keessaa dhukubsatee** | | |
| 201 | Haala fayya keetti akammin ibsitaa /madalta? | 1. Bayee bada /rakisaa kan ta'ee 2. Bada /rakisaa 3. Wayyaa 4.Gaarii 5.Baayee garii kan ta'ee dha, |
| 202 | Halaa dhukubaa keetti kanaa enyutuu addaan bassee? | 1.Ofumaa issaa/isheetiif 2. Muxano kanan dura ture irraa 2. Itti gafatama Abba mana 3.Ollaa 4.Abba Amanta 5. Oggessa Fayya 6.kan biroo_____ |
| 203 | Mallattoon dhukubaa akaam ture? | 1 .Ho'a qamaa 2 .Garaa yassaa 3 .Quffaa 4 .Mataa bowo 5. kan biro ibsi ---------- |
| 204 | Mallatto armaan oliifi kan biro ji'aa kanaa kessatti si'aa meqaa agarsiise | 1.Tokko 2.Lamaa 3.Sadi 4.Afur fi issa oli |
| 205 | Dhukubnii kee kuun yeroo saan hangam hammaata ture? | 1. Bayy'e hammataa 2. giddu galeessa 3.gad-aanaa |
| 206 | Dhibee yeroo dheera/kan hin Fayinee ni qabda? | 0. Eyyee 1 .Lakki |
| 207 | Gaffii 206 olii irraatti eyyee yoo jette Gossaa kami | 1.Dhibee sukaraa 2.Dhibba dhiigaa 3.Asimmii 4.Kansari 5.kan biro ---------- |
| **Kutaa 3 Gaaffi qaqqabiinsa dhaabbata fayyaan wal qabatu** | | |
| 301 | Dhaabbanni fayyaa asi irraa hangan fagaata (km)? | _____ |
| 302 | Bufata fayyaa dhiyoo gahuuf sa'aatii meeqa sittii fudhata? | _____ |
| **kutaa 4 Gaaffii itti fayyadamaa tajajjilaa fayyaa ilaallatu** | | |
| 401 | Tajajilaa yalaa ammayaawa yeroo sii dhukubee saan demteraa? | 0. Eyyee 1. Lakki |

| | | |
|---|---|---|
| 402 | Gaaffi 401’ armaan olii yoo deebi kee eyyee ta’ee essaa dhaqxee /demtte | 1.bufata fayya 2.hospitala motumma.3kellaa fayya 4.hospitala dhunfaa.5.killinika dhunfaa |
| 403 | Dhabtaa fayya kanaa yaliidhaaf akka dhaqtuuf /demtuuf enyutuu filate? | 1. Dhunfaa Offitiin 2. Abba warra 3. Haadha warra 4..Obboleyaan/Obboleetti mattii keesaa gurguddo ta’aan 5. Abba amantaa 6.Ekistestioni fayyaa 7 .Olla 8. Firaa matti kan ta’ee 9. kan biroo_____ |
| 404 | Gaaffii’’ 401 ‘’yoo deebi kee "eyyee" ta’ee si'a meeqa deemte? | 1. Tokko 2. Lama 3. Sadi 4. Afurii fi isaa ol |
| 405 | Gaaffii ‘401’ f yoo "lakkii “jette eessaa waldhaansa argatte/ilaallamte? | 1. Hoomaayyuu hin wal'aannamne 2.Dukkaana dawaa 3. Wal’aansa manattii 4. Iddoo amantaa 5.Yaala aadaatti 6.Kan biroo ibsi_____ |
| 406 | Yoo dhaabbata fayyaa ammayyaa daawwatte Ilaalchi gatii yalaa maal sitti fakkaata? | 1. Mi'aawaa/qaalii 2.Giddu galeessa 3.Rakasha 4.Dhabataa inshurassin kafalama |
| 407 | Dhaabatichaa fayyaa gahuuf baasiin geejjibaa akkamitti ilaalta? | 1. Mi’aawaa 2. Giddu galeessa 3. Rakasha 4.Gejjibni hin jiru |
| 408 | Yoo deebiin gaaffii 401’f lakki ta'e sababni dhaabilee fayyaa ammayyaa hin deemnef maali? | 1.Dhibbeen koo dhaabbatichatti yaalamuu waan hin danda'amneef<br>2. Tajaajila fayyaaf maallaqa kanfaluu waan hin dandeenyef<br>3.kennaan qulqulina tajajila fayyaa/quality of care gad aanaa waan ta'eef 4.Dhaabbatichi narraa faggoo waan ta'eef<br>5. Tajaajila argaachuuf yeroo dheeraa turta waan ta'eef<br>6. Tajaajilli qorannoo laboraatorii waan hin jireef<br>7. .Dawaa manattii waantan fudhaadheef<br>8. Dawaa dukkaana qorichaa irraa waan bitaadheef<br>9. Sababa biro ibsi _____ |
| | **Part 5 Gaffillee ilaalchaa dhukubsataan dhabataa fayyaa ammayawaaf qabaan /attitude Questions toward modern health service /** | |
| 501 | Dhabataa fayyaa ammayaawa irraa yeroon tajajila yalaa argachuun kan aadaan hawassa kessatti kennamuu | 1. Bayi’see irrati wali hin galu, 2.irratti wali hin galu 3. Yadaa hin qabu 4.Bay’iseen |

| | | |
|---|---|---|
| | kanneen akkaa (qorichaa aadaa, amantii fi kkf ) kamiyu dursuu qaba. . | irratti wali gala 5. Irratti wali gala. |
| 502 | Qorichi aadaan hawassaa kessaatti kennamuu kan ammayaa dhabata fayyaa kessaatti kennamuu irraa filatamadha. | 1. Bayi'see irrati hin wali- galu, 2 .Irratti wali hin galu 3. yadaa hin qabu 4.Bay'iseen irratti wali gala 5 . Irratti wali gala. |
| 503 | Itti qufinssi dhukubsataan (patient satisfaction) dhabilee ammayaa irratti qabu hammaa tajajilaa fayyaa kennamuu qabuu irraatti dhibaa ni fida | 1. Bayi'see irrati wali- galu, 2 .Irratti wali hin galu 3. Yadaa hin qabu 4.Bay'iseen irratti wali gala 5 . Irratti wali gala. |
| 504 | Ilaalchi dhabatni fayyaa dhukubaa kiyaa yoo bekkee hawaassaan balalefatamaa jedhu (sodaa) irraa kan kaa'ee yeroon akkaa tajajilaa ammayaa hin arganne ni tasissaa. | 1. Bayi'see irrati wali hin galu, 2 .Irratti wali hin galu 3. Yadaa hin qabu 4.Bay'iseen irratti wali gala 5. irratti wali gala |
| 505 | Tajajjilaa yalaa argachuuf baasi kishaa kessaa (kan biro) basuu irraa misensaa inshurasi fayyaa hawassa ta'uun tajajilaa fayya argachuun irraa filatamadha | 1. Bayi'see irrati wali hin galu, 2 .Irratti wali hin galu 3. Yadaa hin qabu 4. Bay'iseen irratti wali gala 5. Irratti wali gala. |

## 8.5. Annex VI: curriculum Vitae

Personal information

| | |
|---|---|
| Name | Lema Jiru |
| Sex | Male |
| Date of birth | 01/02/1985 G.C |
| Pace of birth | Bale gasger, Arsi , Oromiya, Ethiopia |
| Nationality | Ethiopia |
| Marital status | Married |
| Contact address | Mobile :0923963947<br>Email. **Lema204jiru@gmail.com** |

Education back ground

| Institution | Duration | School |
|---|---|---|
| Higher institution | 2006-2008 | Jimma university ,jimma , Oromiya ,Ethiopia |
| Preparatory | 2004-2005 | Robe did'a sinory secondary school, Arsi, Oromiya ,Ethiopia |
| High school | 2002-2003 | Aminya secondary school, Arsi, Oromiya ,Ethiopia |
| Primary school | 1993-2001 | Bale Gasger Elementary school, Arsi, Ethiopia |

Qualification

BSC degree in Health Education GPA 3.01

Training and certification

| | |
|---|---|
| Malaria control and prevention (TOT)and Entomology | PMI(certified) |
| Nutrition survey | UNICEF with Oromiya DPPC |
| Integrated Disease Surveillance (IDSR) | Oromiya Health berau |
| Community Management Disaster Risky Reduction(CMDRR) | Cordaid (certified) |
| Integrated refresher training (IRT) for HEW TOT | IFHP |
| Community Conversation(CC)for in HIV/AIDS(TOT) | Oromiya Health berau |
| Gender and HIV | IFHP |

| | |
|---|---|
| Work experience | From 01/ 01/2001 -2008 E.C -Working as MCH Department, Health Extension worker coordinator in Mi'esso Woreda Health Office<br>2009 up to know Guba koricha district Health office expert |
| Skill and hobbies | Strong interest in research ,reading ,football watching ,watching movies |
| Language | Speak, listen, Read and Write Excellent Afan Oromo ,Amharic $ English |

| | |
|---|---|
| Referance | Lello Amdisa: Clinton Health access Initiative (CHAI)<br>Mobile _ 0910859555<br>.Yohanis Abebe Mi'esoo woreda MCH Department Head<br>Mob- 091000937 |