HARAMAYA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

Health Care Seeking Behavior on Common Childhood Illnesses and Associated Factors among Mothers with Under Five Children in Lume District East Shoa, Central Ethiopia

MPH THESIS

BY

Oliyad Bilbila

June, 2018

Haramaya University, Ethiopia

Health Care Seeking Behavior on Common Childhood Illnesses and Associated Factors among Mothers with Under Five Children in Lume District East Shoa, Central Ethiopia

In Partial Fulfillment of the Requirement for the Degree of Masters of Public Health

Oliyad Bilbila (BSC)

College: Health and Medical Sciences

Department: Public Health

Program: General MPH

Major Advisor: Bizatu Mengistie (PhD)

Co-Advisor: Biftu Geda (PhD)

April, 2018

Haramaya University, Ethiopia

STATEMETNS OF AUTHOR

By my signature below, I declare and confirm that this thesis is my own work. I have followed all ethical principles of research in the preparation, data collection, processing, analysis, and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. This thesis will be submitted for partial fulfillment of the requirement for a degree of Masters from the School of Graduate Studies at Haramaya University.

Name: Oliyad Bilbila Signature _____

Date: _____

Department: Public health.

ACKNOWLEDGEMENT

First and for most i would like to thank my advisors Dr Bizatu Mengistie and Dr Biftu Geda for their valuable and constructive advice and comments throughout this thesis work. I also acknowledge Haramaya University School of Graduate Studies and Department of Public Health for giving me this opportunity to conduct my thesis on Health care seeking behavior and associated factors. My special gratitude goes to Oromia Regional Health bureau for their financial support to perform this thesis and Lume District Administrative Office for giving their permission to conduct this study in the District. Finally, I am grateful to all the study subjects who willingly gave their time to respond to the questionnaire, the data collectors and supervisors for their full cooperation throughout the data collection period.

Table of Content

Table of content continued

LIST OF TABLES

Tables **Page**

LIST OF FIGURES

Figure **Page**

LIST OF ACRONMYS/ABBREVIATIONS

AOR	Adjusted odd ratio
ARI	Acute respiratory infection
BSC	Bachelor of Science
CI	Confidence interval
CSA	Central statistics Agency
DHS	Demographic health survey
DRC	Democratic republic of Congo
EDHS	Ethiopian Health and Demographic Health Survey
HEW	Health extension worker
HH	House Hold
HSB	Health seeking behavior
IHRERC	Institutional Health Research and Ethics Review Committee
MICS	Multiple indicator cluster survey
NGO	Non-governmental organization
PHC	Primary health care
SPSS	Statistical Package for Social Science
SRS	Simple random sampling
UN	United Nation
WHO	World Health Organization

ABSTRACT

Background:-Health care seeking behavior has been defined as any action undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy. In most developing countries, the health of the children is strongly dependent on maternal healthcare behavior. Appropriate and prompt health seeking is critical in the management of childhood illnesses. However, there is scarcity of information among mothers/caregivers for treatment of common childhood illness.

Objective:-The objective of this study is to determine health care seeking behavior and associated factors on common childhood illnesses among mothers with under five children from February 01 to March 01, 2018.

Method:-Community based cross-sectional study was conducted among 611 mothers/caregivers with under five children who had common childhood illness within two weeks preceding the survey. Multistage sampling technique was used to select the study participants. Data was collected by face to face interview using structured questionnaire. The collected data was entered into Epi Data version 3.02 and exported to SPSS version 20.0 for analysis. Bivariable and multivariable logistic regression analysis were undertaken to identify the factors associated with health care seeking. OR and 95% confidence interval was computed.

Results: Of the total sick children with common childhood illness reported, care was sought for 414 (69.9%) 95%CI :(66.0%, 74.0%) from health facilities. Being urban dwellers (AOR=3.10; 95%CI: 1.10, 9.10), education status of mother being primary school (AOR=4.14; 95%CI: 2.17, 7.89), and perceived severity of the illnesses (AOR=3.21; 95%CI: 1.62, 6.30), were identified as independent predictors of health care seeking practices from health facilities. Perception that illness was not serious 54(49.5%) and lack of money16 (14.7%) were the main reasons given for failure to seek care from health facilities by the mothers.

Conclusion: Although health care was most often sought from health facilities (69.9%), considerable proportion of mothers, (30.1%) of the sick children were not taken to health facilities for care. Seeking care from HF's was delayed (70.1%).Furthermore, residence of mother's education status of the mothers, and mothers/caregivers perceptions about severity of illness were independent predictors of modern health care seeking behavior for childhood illnesses.

Key Words:-Health seeking behavior, under five children, common childhood illness,

1. INTRODUCTION

1.1. Background.

Health care seeking behavior has been defined as any action undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy. Health seeking behavior is preceded by a decision making process that is further governed by individual and/or household behavior, community norms and expectations as well as provider related characteristics and behavior (Olenja, 2003). The decisions made encompasses all available health care options like visiting a public hospitals, health centers, health posts, non governmematal and private health facilities (Chauhan*et al.*, 2015).

Despite the substantial reductions in the number of deaths observed in recent decades, around 5.6 million children under five ages died in 2016, of these 2.6 million children died in the first month of life and 15, 000 death occurred each day. More than half of these early child death are due to conditions that could be prevented or treated with access to simple and affordable interventions (WHO, 2017). Globally forty-five per cent of these deaths occur among babies aged 0–28days are mainly due to preterm birth complications, birth asphyxia and after the first 28 days until the age of five years, the majority of deaths are attributable to the common childhood illnesses such as pneumonia (16%), diarrheal diseases (9%) and malaria (5%) (WHO, 2016).

Although the major causes of under-five mortality remain the same globally, their relative importance varies across regions of the world. While, in low-income countries, these infectious diseases account for a large proportion of under-five deaths (UN, 2013).Under-five mortality rate was high with estimate of 1 child in 13 dying before his or her fifth birthday in Sub–Saharan African countries compared to other parts of the world (WHO, 2017).

In most developing countries, the health of the children is strongly dependent on maternal healthcare behavior. Appropriate and prompt health seeking is critical in the management of childhood illnesses. The multiple global development initiatives that have prioritized child health over the past four decades have raised and maintained global and national policy attention on child mortality (Murray, 2016).The current policy of countries focuses on providing prompt and effective access to treatment of childhood illnesses. The success of this policy hinges on a family's decisions regarding whether to access health care and where to seek health care (Adam *et al.*, 2015).

1.2. Statement of the Problem

Globally many child deaths are attributed to delays in seeking care, so a timely care seeking practice has a great importance in areas with limited health access. The world health organization estimates that seeking appropriate and on time care by care givers could reduce child death by 20% (Anwar *et al*, 2015).Finding in Peru showed, although 97.2 % of children had access to health care only 63.1% of children who become ill sought care from health facilities (Guimar˜aes *et al.*,2015).

A systematic review on the recognition of and care seeking behavior for childhood illness in developing countries revealed, 73.0% of caregivers sought care from a healthcare provider when their child was suffering from diarrhea, malaria or pneumonia and only 44.9% sought care from appropriate providers that are qualified medical professionals in government health facilities and private hospitals or clinics (Geldsetzer*et al.*, 2014).

Levels of treatment seeking for symptoms of childhood illnesses varied across countries and sub regions, by illness symptoms, and among surveys carried out between 2000 and 2013.In this study treatment seeking across countries in Eastern Africa ranged from 14% to 72% for symptoms of diarrhea, 18% to 100% for fevers, and 21% to 76% for symptoms of ARI, with a significant increase over this period in treatment seeking for diarrhea (Adam *et al.*, 2015).

A study on care seeking behavior for children with suspected pneumonia in six sub- Saharan Africa with high pneumonia mortality shows all countries, except Ethiopia, care was sought for the majority of children with suspected pneumonia. About 85% of Tanzanian children with suspected pneumonia were taken to a provider by their caregiver, as opposed to only 30% in Ethiopia (Noordam *al.*, 2015).

In Ethiopia only (29.87%) of caregivers sought health care for their ill children. Among those who sought care, the most frequent first option for treatment of a child with common childhood illness was primary health care facilities followed by higher hospital. On separate analysis for each illness showed that (68.01%) children with fever, (64.44%) with diarrhea, and (83.41%) with ARI did not receive any modern treatment (Gebretsadik *et al.*,2015).Similarly only 5.9% of caregivers took their sick child within 24 hours from the recognition of illness, and most (55.8%) caregivers sought care after the third day (Bekele *et al.*, 2015).

Maternal education, age of mothers and child, gender, socioeconomic status of the household, perceived severity of illness, number of children under five years of age in the household, and area of residence were some of the factors related to health care seeking different types of health facilities (Gebretsadik *et al.*, 2015).

Now days even if the global health community has evidence-based preventive and treatment interventions to control the common childhood illnesses, but still pneumonia, diarrhea and malaria remain the leading causes of death in this age group and yet over two million children continue to die from these infections (Kesetebirhan, 2014).

Although provision of treatment for common childhood illnesses is among the health agenda priorities in Ethiopia, few studies have assessed the factors associated with care seeking behavior and still there is scarcity of information among mothers/caregivers for treatment of common childhood illnesses.

Therefore the purpose of this study is to assess mother's/ care givers health seeking behaviors for common childhood illness and identifying associated factors in order to design appropriate interventions for the improvement of child health.

1.3. Significance of Study

Information about mothers/care givers health care seeking behavior for common childhood illnesses is very important to design appropriate intervention in areas where under-five child mortality rate is high to reduce child deaths from easily preventable and treatable diseases.

The finding of this study will help different bodies as follows.

- For programme managers, professionals and health providers it helps to understand the magnitude of health seeking behavior and associated factor on common childhood illnesses so that they can create awareness to the community that improve early health care seeking behavior and promote child health in study area.
- At the community level, information regarding service utilization and preferences can be used to improve the appropriateness of the medical and health care services offered particularly in lume district.
- Additionally the finding of this paper may invite other researcher to conduct further studies.

1.4. Objectives

1.4.1. General objective

To assess health care seeking behavior of mothers/caregivers for common childhood illnesses and associated factors in lume district, east shoa zone from February 01 2018 to March 01, 2018.

1.4.2. Specific objectives

To determine magnitude of mothers'/caregivers health care seeking behavior for common childhood illnesses.

To identify factors associated with health care seeking behavior for common childhood illnesses.

2. LITRATURE REVIEW

The literature reviewed in this study is assumed to be recent from 2012 up to 2017 which contains the published articles on Google scholar, PubMed (**www.pubmed.com**) data bases were searched for recent and relevant articles by using the search terms such as HSB, common childhood illness, treatment seeking of under-five children and also little sources like WHO and UN website sources are used. This review provides description and summary of literatures related to the problem to be investigated.

2.1. Mothers Health Care Seeking Behavior

A community-based cross sectional survey conducted in northeastern Albania among 218 under five sick children identified 64% of children with ARI and diarrhea, were taken to health facilities or providers for medical care. Health care was not sought for 20% children whereas 15% children received home treatment. In this finding treatment seeking was delayed, 59.6% of children started care seeking on the second and subsequent days of perceived onset of illnesses. Most mothers seeking care chose the public hospitals (66.7%), followed by public health centers/posts (26.4%), home visits by village nurse/midwife (4.6%) and self-medication (3%)(Doracaj *et al.*, 2015).

The community based cross sectional finding in India Hooghly district among 227 under five children showed treatment was sought for 93%, 90.7%, and 98.2% of the children with ARI, diarrhea and fever respectively. A higher percentage (36.8%) of the episodes of illness among males was treated by the private clinics compared to that of the females (27.3%). In most of the cases among females, (36.4%) treatment was taken from health center. In 9.1% of children, parents purchased drugs using previous prescriptions or used over the counter drugs. Overall, 7.5% of the episodes of illness in children were not treated at all and for (72%) of the episodes of illness, treatment was sought within two days (Dey and Chaundhuri, 2012). Whereas another cross sectional study conducted in India Karnataka city among 348 under-five children who were suffering from one or more childhood illness revealed (81.0%) were taken to health care facility, and mostly private facility were preferred. Two third of them were taken to hospital on the first day itself (Yamuna *et al.*, 2017).

According to study done India in rural Block Assam among 375 care givers with under-five children in which all of them interviewed at home found 283 episodes of different morbidities and

of the all these episodes 31% of caregiver approach government hospital for treatment while 23.7% caregivers went to private clinics. 16% primary caregivers sought no care for the child and 5% went to traditional healers for their children (Kalita *et al.*, 2016). Another cross sectional study done in rural area of Gujarat children age 2 months to 5 years age revealed, of 147 male children, about 48.30% of them received treatment from public sector and 30.61% received treatment at private sector, while 21.09%, did not received any treatment. Similarly of 90 female children, in 30.0% of the cases, no treatment was received, in 46.67% cases received treatment at public sector and 23.33% of cases received treatment at private sector (Yerbude *et al.*, 2017).

A descriptive cross sectional study conducted in Dhaka city Bangladesh among 439 under five children revealed (90%) of the mothers /caregivers sought health care services during child's illness. Only (9.1%) respondents did not seek health care services. Among those who sought health care, most (50%) of them consulted drug sellers of pharmacy during illness of their children. The rest, (34.6%) mothers/ care givers went to college hospital, (13.5%) of them went to Govt. hospital, (11%) consulted a private practitioner and (6.3%) received NGO facility (Mahejabin*et al*, 2014). Other nationally representative cross sectional survey finding among (375) care givers with under five children showed that low care seeking observed compared to previous study 289(77%) of mothers sought any type of care for their children. Most cases (75.16%) received service from any of the formal care services whereas approximately 23% of children did not seek any care; however, a small portion of patients (1.98%) received treatment from tradition healers (Sarkar *et al*, 2016).Similar study in Nepal revealed of 102 respondents with 0-59months age of children, majority of the respondents (81.4%) sought for treatment, in health facility or by traditional healer while 18.6% of mothers did not seek any treatment. Of respondents who had sought for treatment, majority (46.4%) of the decision was made by husband to sought care (Shrestha, 2015).

In Yemen a cross sectional study showed out of 212 under five sick children, (51.42%) sought medical care, while (9.91%) caretakers did nothing in response to illnesses. Care seeking in this finding was delayed with mean duration of 3 days before seeking care. Only (17.43%) of medically treated children, care was sought on the first day of perceived onset of illness. The first action taken by care givers for their sick children were used purchased drugs. Decision was made

by both parents for 75 (35.38%) children and 29.25% of the respondents stated that the decision was taken by the mother alone (Webair and Bin-Gouth, 2013).

A cross sectional household cluster survey which has both quantitative and qualitative nature conducted in four poor rural Sierra Leone districts among 5951 under five year children indicated 85% of children were brought for care for common childhood illnesses. The highest care seeking was for pneumonia with 90% of children having the symptom sought care outside home. About 75% of children were brought to a public facility, regardless of their illness type (Diaz *et al.*, 2013). On the other hand similar cross sectional survey among 2,317 6-59 months children revealed, health seeking for common childhood illnesses broadly varied in Mozambique, only 25% for respiratory illness taken to a health facility, compared with 57% for diarrhea and 65% for fever (Bayham *et al.*, 2017).

A cross-sectional survey in Nigeria among3632 under-five children with fever revealed 1142 (31.4%) parents sought care at an appropriate site(M.B. Abdulkadir and Z.A. Abdulkadir, 2017).The place of primary care of children by caregivers was at home 142 (38.4%), chemist shop 91 (24.6%) and health facility 80 (21.6%) (Aigbokhaode*et al.*, 2015).While a study in Uganda Kabarole district on HSB of fever among 368 under five children found, 91.5% (226/247) with fever care givers sought treatment for their children. During the study period caregiver's choice of treatment place was (33.6%) from government health facilities, 30.4% from non-government health facilities and 17.4% used home treatment (Gerald, 2015).

According to cross sectional study conducted in Tanzania among 2,077 under five children identified 515,250 and 139 children had fever, diarrhea and ARI two weeks prior to study period respectively. Regarding parental care seeking, most children with fever (91.5 %) and ARI (92.1 %) received care while this proportion decreased to 73.2 % of children with diarrhea. About three-quarter of children with fever (74.3 %) and ARI (77.3 %) were initially treated at a health facility (dispensary, health center or hospital) while this proportion was only 23.0 % for children with diarrhea. From the finding 60.1 % of children with diarrhea were treated first at home while this proportion was only 5.7 % for children with fever and 3.1 % for children with ARI. About 45 % of all children with fever or ARI and 41 % of children with diarrhea were treated in a public facility (Kante *et al.*, 2015). Other study on care-seeking and management of common childhood illness which used data from DHS among 2,840 under five children revealed more than half of the

sick children were taken to a health care provider: 64.3% with fever, 53.3% with diarrhea and 60.8% with symptoms suggestive of ARI. PHC facilities was the most common first option for child care, followed by private pharmacies (Kahabuka, *et al.*, 2013).

In Ethiopia a study done on help-seeking behavior using EDHS data for children with acute respiratory infection among 773 under five age of children with symptoms of ARI showed only 209 (27.2%) were taken to a health facility for care(Astale and Chennault,2015).Nationally the health care treatment sought on common childhood illness for under five children from health facility was only 30%, 35%, 44% for acute respiratory infection (ARI), fever and diarrhea respectively during five years preceding 2016 (CSA, 2016).

A community based cross sectional study conducted in Amhara region Ensaro District among 212 sick under five children revealed (90.6%) of mothers /caregivers sought treatment for their sick children. Majority of the mothers/caregivers seek care from governmental health facilities (59.9%), followed by traditional treatment (16.5%), private health facilities 23(10.8), no action were taken 20 (9.4%) and give home remedies 16 (7.5%). In this finding treatment seeking were delayed only 12.7 % mothers/ care takers sought care on the first day of childhood illness the other 53.3%, 18.9% and 15.1% of mothers/care takers sought care after three or more, two and one days of childhood illnesses respectively (Sisay *al.*, 2015).Similar community based study in Bahirdar showed about (72.7%) childhood illness mothers/caregivers sought treatment for from either governmental or private health care facilities found in Bahirdar. Treatments were not sought for (27.3%) of sick under-five children (Worku, 2013).

A study which used community based cross sectional design in Oromia region Jeldu District among 422 under five sick children showed any care was sought for (79.6%). In this finding health facilities were the most common sources where care was sought which accounts (74.6%) of sick children. Moreover, care givers sought care from home remedies for (55.2%), purchased medicine from pharmacies for (27.3%), religious healing for (32.0%), and traditional healer for (21.6%) and 'Holy water' for (5.0%) sick children. Separately 81.1% of children with diarrhea, 79% of those with fever, and 77.6% of those with suggestive symptom of ARI were taken to health facilities. Seeking care from health facilities for sick children was delayed, only (13.7%) children taken to health facilities within 24 hours after recognition of the illnesses while 272 (86.3%), care seeking was started on the second and subsequent days (Tufa *et al.*, 2016).

2.2. Factors Affecting Health Seeking Behavior

According to community based cross sectional study done in India west Bengal among 227 under five children found commonest reason for not contacting a health personnel was that the parents thought the illnesses to be of mild nature and self-limiting. Poverty was also found to be responsible. Another similar study in India identified education status were factors associated with healthcare-seeking behavior that is among 163 (68.78%) literate mothers 68.71% sought care while among 74 illiterate mothers, only 28.38% had healthcare-seeking behavior ($p<0.0001$). Gender of child was also factor associated with healthcare-seeking behavior during illness of 147 mothers having a male child, 82.31% sought healthcare services, whereas, among 90 mothers having a female child, only 42.22% mothers sought health care ($p<0.0001$).(Dey and Chaundhuri, 2012) (Yerbude *et al.*, 2017).

A study which used community based cross sectional design in Nepal on 102 under five children revealed, majority (94.2%) of mothers sought treatment for their male child. This reveled that there is statistically highly significant relationship between sex of the child and health seeking behavior of the mother. About (89.1%) of the mothers whose child had pneumonia sought treatment which shows significant relationship between type of sickness of child and health seeking behavior of mothers, whereas in Bangladeshi age of children, age and education of mothers, occupation of mothers, number of <5-year-old children, wealth index, and floor of the household were factors associated with health care seeking behavior compared with no care, similarly literacy status of the mother were the main predictor of care seeking for under five children in India(Shrestha, 2015)(Sarker *et al.*, 2016) (Ghosh*et al.*, 2013).

A systemic review done in developing countries on recognition and care seeking behavior of childhood illness shows that urban care givers, severity of illness , socioeconomic status and cost of health care, and gender were main factors influencing care seeking for childhood illness.. In Yemen among 103 under five sick children those who did not seek medical care, the main reason was stated as being illness was mild 38.83%. Similarly the main reason for delaying seeking medical care for more than 3 days was thought the illness was mild/will resolve (66.32%).This finding also identified factors affecting health seeking behavior such that caregivers with secondary school education, and perceiving illnesses as severe were six and five times more likely to seek medical care respectively than non-educated ones and illness not severe (Geldsetzer *et al.*, 2014)(Webair and Bin-Gouth, 2013).

A population-based cross-sectional survey in Mozambique among 2,317 6-59 months children identified factors associated with health care seeking across all illnesses (fever, diarrhea, and respiratory illness) was higher maternal education. Higher maternal education (5 years versus 0 years) was associated with a roughly 1.5 times higher odds of seeking care at a health facility for all three illness categories (Bayham *et al.*, 2017).In Nigeria cross sectional survey among 3632 under five children with fever indicated current marital status, maternal educational status, maternal age, age of the child, religion, wealth index, place of residence and current working status of mother were factors associated with appropriate care-seeking practice during illness (all $p< 0.05$)(M.B Abdulkadir and Z.A. Abdulkadir, 2017).On the other hand cost and long waiting time were major reasons for not seeking care in health facilities (Aigbokhaode *al.*, 2015).

A study done in six sub Saharan African countries with high pneumonia mortality which use data from DHS and MICS survey identified age of a child, care givers education, sex of child, and wealth quintile were factors associated with health seeking behavior. In Nigeria, younger children (<2 years) were 1.7 times more likely to be brought to a care provider than children between 2 and 5 years of age (95% CI = 1.1–2.5, $p<0.01$). This association between younger age of the child and care seeking from appropriate providers was also found for Ethiopia and DRC. In Tanzania, Ethiopia, Nigeria and Burkina Faso, caregivers from the richest quintile were much more likely as those from the poorest quintile to seek care for their child with suspected pneumonia, with odds ratios ranging from 4.7 (95% CI 1.5–15.1) to 9.4 (95% CI2.3–39.3). While similar patterns did not observed in the DRC and Uganda. With regard to the sex of a child in Uganda, girls were 1.7 times more likely to be brought to seek care than boys (95% CI = 1.2–2.4, $p<0.05$) (Noordam *al.*, 2015).

In Uganda a household survey conducted among 368 caregivers of under five children showed the factors associated with health seeking behavior for treatment of malaria were age above 30 years and, education (above secondary) of caregivers with COR of 7.1, CI [1.42-7.57, and 6.9 CI [1.39-9.37] at 95%CI.Similar study in Tanzania among 1643 caregivers with under five children imply that health-seeking behavior is not influenced by gender of the child but caregiver's age was found to influence health seeking behavior for fever and children of older caregivers were less likely to have a diarrhea illness reported than their peers (Gerald, 2015) (Kante *et al.* , 2015).

In Ethiopia a study conducted on help-seeking behavior among 773 under five children with ARI found that factors associated with care seeking were having just one under 5 years child in the household , for small family size which is 2 to 5 , high wealth index , for being a young mother aged and having received prenatal care(Astale and Chennault,2015).

A study done in Northwest Ethiopia among 827 mothers with under five children identified variables such as residence (Mothers who lived in urban AOR: 11.5, 95% CI (5.407, 24.483), perceived severity illness OR: 9.23, 95% CI (5.88, 14.562], sex ,male preference children 61.0% [AOR: 1.610, 95% CI, (1.040, 2. 495)], younger mothers [AOR: 0.558, 95% CI, (0.339, 0.919)] , younger children [AOR: 0.240, 95% CI: (0.083, 0.699)] , educational level of fathers(mothers' whose husband attend formal education) (AOR:2.467, 95% CI: (1.385, 4.380) and fourth wealth Quintiles [AOR: 5.126 95% CI: (2.544, 10.331)] were more likely to seek health care than the counter parts. Similar study in southern Ethiopia shashogo district among 907 mothers/care givers of under five children revealed that knowledge of mothers about illness, mothers having male child, symptom of cough, diarrhea and marital status were main predictors of healthcare seeking behaviors with odds ratio ranged from 1.39 (95% CI, 1.04, 1.87) to 3.16 (95% CI, 1.33, 7.51).In this finding age does not have association with health seeking behavior (Gelaw *et al.*, 2014). (Bekele *et al.*, 2015).

A community based comparative cross sectional study done north shoa zone derra district among 563 mothers with sick under five children showed economic statuses of mothers (OR=2.3, 95% CI, 1.11, 4.96), illness perception (OR=2.43, 95%CI, 1.2, 4.85), residences (OR=8.99, 95%CI, 3.46, 23.1) and knowledge of mothers (OR=2.9, 95%CI, 1.42, 5.99) had significant association with health care seeking behavior from health facilities. But lack of money 30 (36%), distances 23 (27.7%) and perception of the illness not being serious 21 (25.3%) were the major reasons for not seeking care (Tsion *et al.,* 2008).Similar study in Jeldu district Oromia region among 422 sick children showed marital status of the caregivers, number of symptoms experienced by the child and perceived severity of the disease were factors associated with health seeking behavior with odds ratio of (OR = 2.72; 95%CI: 1.63–4.55), (OR = 2.40; 95%CI: 1.50–3.83) and (OR = 3.35; 95%CI: 2.10–5.34) respectively. (Tufa, *et al.*, 2016).

2.3. Conceptual Framework

This conceptual frame work is adopted from Anderson behavioral model and modified based on Ethiopian context the variables that affects the outcome variable are broadly classified as predisposing factors, enabling factors and characteristics of illness.

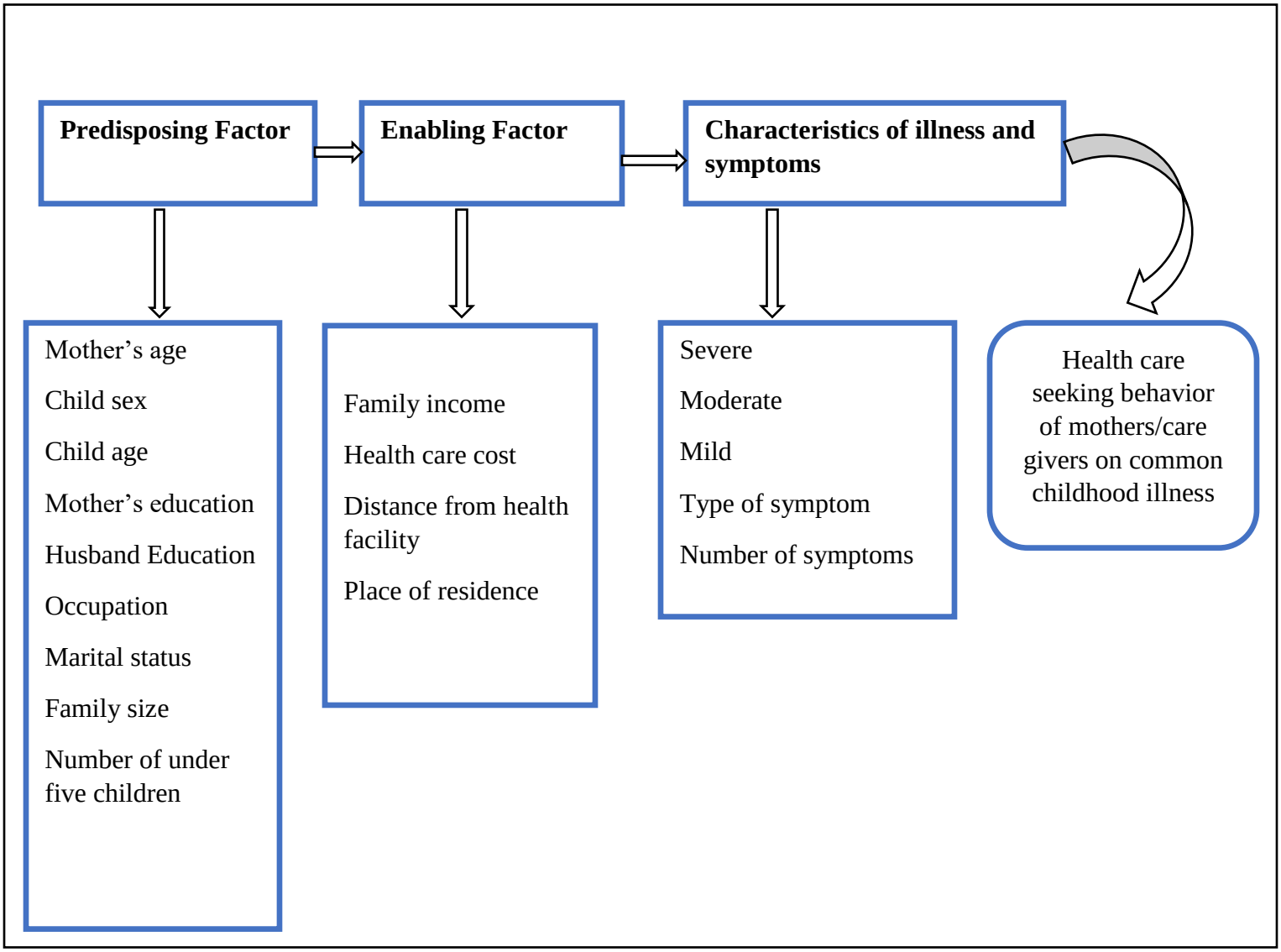


Fig.1 Conceptual frame work for health care seeking behavior for common childhood illness (Modified from (Anderson, 1995)

3. METHODOLOGY

3.1. Study Area

The study was conducted in east shoa zone lume district which is one of districts located in Oromia region of east shoa zone. This district is located in Great Rift Valley in the south eastern direction on the distance of 75 km from Addis Ababa, the capital city of Ethiopia. According to information obtained from the district health office, the total population of the district is 119,016 and total households of 24,795.Out of these 19,554 were under five children. Lume bordered on South by Lake Koka, on West by Adaá, on North West by gimbichu, on East by Adama district and on North by Amhara region. The most common languages spoken in the district is Afaan Oromo followed by Amharic. The district has 35 kebeles of which 33 are rural and 2 are urban kebeles'.Regarding health facility, the district has 5 health centers, 14 private clinics and 35 health posts which serve the community. The district has hundred percent health coverage and has 140(one hundred forty) health workers of this 69 are health extension worker (Lume Health Office, 2017).

3.2. Study Period

The study period for this research was from February 01 2018 to March 01, 2018.

3.3. Study Design

A community based quantitative cross-sectional study design.

3.4. Source of Population

The sources of the population were mothers living in Lume district, who have under-five with common childhood illnesses children during the study period.

3.5. Study Population

The study populations were mothers/caregivers of under-five children with common childhood illness within the two weeks before survey and living in households of selected kebeles.

3.6. Inclusion and Exclusion Criteria

3.6.1. Inclusion criteria

All mothers/caregivers who had under-five children with history of common childhood illness within the two weeks before survey in the household and reside for more than six months in the selected kebeles were included in the study.

3.6.2. Exclusion criteria

Mothers/caregivers that had serious mental problem and those who were sick. Mothers/caregivers with under five children's had got illness other than common childhood illness.

3.7. Sample Size Calculations

The sample size required for this study is calculated using both single proportion formula for magnitude and using Statcalc under the Epi Info 7 software to calculate sample size for associated factors. Then the larger sample size was selected from both (magnitude and associated factors) as a final sample size for the study since the small unselected sample size will be included in the larger sample size selected.

For specific objective one

The sample size is determined by using single population proportion formula. The following assumptions were considered, margin of error 5%, 95% confidence level and adding 5% to compensate for non-responses and the proportion of health care seeking behavior of mother /care givers for childhood illness (P), 74.6% from research done at Oromia region Jeldu district (Tufa *et al.*, 2016).

The formula for calculating the sample size is:

$n = \frac{Z^2\alpha/2\ p\ (1-p)}{d^2} = n = \frac{(1.96)^2 * 0.746(1- 0.746)}{(0.05)^2} = 291$, design effect 2and plus(5%) non respondent

rate =611

Total sample size needed was= 611

For specific objective 2:

Sample size was calculated using double proportion by Statcalc under Epi Info 7 software.

Educational status of care givers is one of the major factors associated with health care seeking behavior which is assumed to be includes others sample responds for other factors.

According to study conducted on mothers health care seeking behavior and associated factors for common childhood illnesses among mothers with under five children in Jeldu district west shoa Oromia 48.8% of respondents with no education sought health care for their children and the crude odds ratio for this variable is 2.34(Tufa*et al*., 2016).

Using this previous information, sample size is calculated as follows:

Step1: Open Epi info 7

Step2: Click on Statcalc option then select sample size and power then point to unmatched cohort and cross sectional studies.

Step3: Select unmatched cohort study and cross sectional studies and fill the following information in respective places.

Two-side confidence interval (1-α) = 95%

Power (1-β) = 80%

Ratio of controls to cases= 1:1

Percent of controls exposed (illiterate) = 48.8% (Tufa et al., 2016).

Odds ratio=2.34(Tufa*et al.*, 2016).

Step 4: Total sample size was calculated like on table 1 below

Specific objective 2	CI	Power	Ratio unexposed: Exposed	Outcome in unexposed (illiterate)	Outcome in exposed (literate)	Calculated sample size Times 2	Non response rate	Total sample size
Determinant factor (Education status of mothers)	95 %	80%	1	48.8%	69.0%	408	20	428

Table 1**:** Sample size determination

The sample size from both specific objectives was summarized on the table 2 below:

Magnitude and Determinant factors	Author	Year of publication	Calculated sample size x 2	Non response rate (5%)	Total sample size
Magnitude of health care seeking behavior	Tufa*et al.*	2016	582	29	611
Determinant factor (Education status of care givers)	Tufa*et al.*	2016	408	20	428

Table2: Summarized sample size determination. As shown on the above table, the largest possible sample size is 611. Therefore the total sample size for this study was 611**.**

3.8. Sampling Techniques

Multistage sampling technique was used to select the study participants. The district is classified in to two strata; urban and rural. Then one urban and seven rural kebeles were randomly selected. To identify households with under five children perceived common childhood illness during the last two weeks, census of households was conducted in the selected kebeles. The households with under five children and have an experience of common childhood illness two weeks prior to the study period was selected using simple random sampling method based on the sampling frame obtained from census of households conducted for the purpose of this study. Mothers/care givers in the selected households was interviewed at their home. In the cases of more than one index mother of under-five children per household, one mother was selected by lottery method. The schematic presentation of the sampling technique is presented in Fig2.

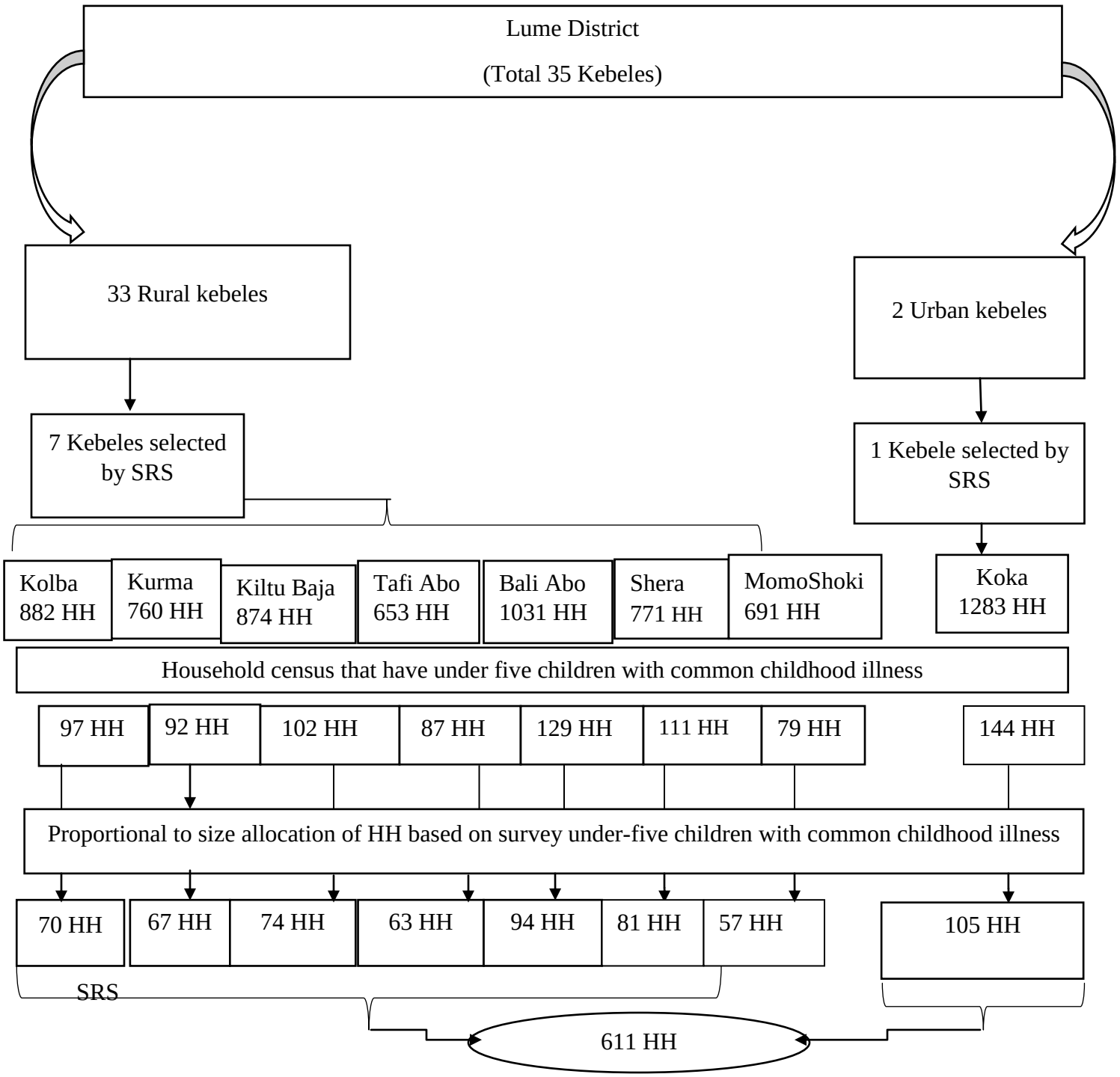


Figure2: Schematic presentation of sampling procedure in Lume District, April 2018

3.9. Data Collection Methods

3.9.1.Data collection instruments

Data was collected using structured and pretested questionnaire. The questionnaire had four sections: section I, socio demographic characteristics of mothers/care givers, section II, socio-demographics, and health-related information of sick child, section III Information about health care seeking behavior of mother/ care givers for sick child and section IV Information about health facility. Questionnaire was adopted from previous researches done in Yemen (Webair and Bin-Gouth, 2013) with permissions of the researcher and modified according to Ethiopian context. English version of the questionnaire was translated in to Afaan Oromo and Amharic language for better understanding by the data collectors and respondents and back to English versions to keep its consistency.

3.9.2.Data collectors

Six diploma nurses as data collectors and two supervisors (BSC nurses) were selected; three days training were given on questionnaire, collection of data, ethics and how to supervise so as to get quality data. Close supervision was made by investigator throughout the data collection process. 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.

3.9.3.Data collection procedures

Data was collected using face-to-face interviewer-administered based questionnaires by trained data collectors from mothers/caregivers with under five children. After getting informed written and signed consent from each participant the data collector interviewed the study participant by using clear and understandable questionnaire that were translated to local language so that the respondent answers properly. Individuals were interviewed in a separate place to keep their privacy. The confidentiality of information collected from individuals was kept and explained for the respondents prior to interview.

3.10. Study Variable

3.10.1. Dependent variable

Health care seeking behavior of mothers/caregivers

3.10.2. Independent variable

Age of mothers	Residences
Marital status	Sex of the child
Ethnicity	Age of the child
Religion	Number of under-five children
Family size	Perceived severity
Average monthly income	Type of symptom
Educational status of mothers	Number of symptom
Educational status of husband	Availability of health facilities
Mother's occupation	Distance from health facilities

3.11. Operational Definition

Health seeking behavior: Was defined as mother's response for signs and symptoms of illnesses to reduce severity, complication or even death after she recognized her child's illness and if she reported visiting any health institutions; health center, health post, private clinic and non-governmental health institution. Mothers that did not report visiting any health institution for the perceived common childhood illnesses were considered as healthcare non-seeker (Tsion*et al*., 2008).

Common childhood illnesses: In this study common childhood illnesses are acute respiratory infections, diarrheal diseases and febrile illnesses (Sisay *et al*., 2015).

Perceived severity: If the mothers/caregivers reported their sick children get weaker with time, unable to feed and drink (Tufa *et al*., 2016).

Appropriate care: is care sought first from health facilities (public and private)/ qualified health professionals (Sisay *et al*., 2015).

Prompt care: care that was sought from health facilities within 24 hours from the recognition of the illness (Tufa *et al*., 2016).

Delay: care that was sought from health facilities after one day (24hours) (Tufa *et al.*, 2016).

Acute respiratory infection: all cases who had cough accompanied by short or rapid breathing in the two weeks preceding the survey as perceived by mothers or care givers (Yamuna *et al.*, 2017).

Diarrhea: is determined as perceived by mother or caregiver, or three or more loose or watery stools per day, or blood in stool was reported (Yamuna *et al.*, 2017).

Fever: - Perceived by mother as fever or hot body for any child two weeks preceding the survey (Tsion *et al.*, 2008).

3.12. Quality Control

First the questionnaires was pre-tested in Adaá district which are located in west of lume district. The pretest was carried out on 31 individuals and the data collectors were gotten a chance to be acquainted with the interview technique. Daily basis discussion with data collectors and supervisors was made so as to check completeness, consistency and quality of data. To check the validity of the data the supervisors interviewed five percent of participant and the principal investigator collected the completed questionnaire every day and checks each for inconsistencies and irrelevancy and any omission. Any filled questionnaire with problem was corrected by revisiting the household. Data clerk entered the data as coded and written on the paper. To avoid errors, missing and duplication of data during data entry double data entry was done. Data was cleaned, coded and entered into EpiData version 3.02 to make ready for analysis.

3.13. Methods of Data Analysis

After data collection, filled questionnaires was coded and checked for completeness, consistency and clarity. Double data entry was used and entered in to Epi Data version 3.02 after this data was exported to (SPSS) version 20.0 for analysis. To identify missing values frequencies of the different variables was run. Means, standard deviation and proportions for the different variables was calculated and the data was presented in tables and figures. Bivariable analyses were done for the independent variables with the outcome variable (health care seeking behavior) and select variables for the multivariable analyses. At the end variables with $P \leq 0.2$ on the Bivariable analysis was entered to multivariable binary logistic regression model to determine their independent effects on the outcome variable and their odds ratios (OR) associated with these important factors was explained and reported as a measure of strength, at 95%CI and the P- value of <0.05 was considered statistically significant.

3.14. Ethical Consideration

Before going to any process of data collection, ethical clearance or approval was obtained from Institutional Health Research Ethics Review Committee (IHRERC) of Haramaya University College of Health and Medical Science. More over a supportive letter was obtained from Haramaya university collage of health and medical science for lume district health office. Informed, volunteer written and signed consent was obtained from participant .Confidentiality and the right of respondents was respected as well as each participant was explained about the purpose of the study. The respondents were assured that information would remain confidential and would be used for the purpose of this study only. Health education was given for those of mothers/caregivers with poor health care seeking behavior.

3.15. Information Dissemination

The result of this study was submitted and presented for Haramaya University School of graduate studies and copy will be sent to east shoa zone health bureau and lume district health office. An attempt will be made to present the result of this study in the scientific conferences and publish on the local or international journals.

4. RESULTS

Socio-demographic characteristics

A total of 592 mothers/caregivers were involved in this study giving an overall response rate of 97 %. Of those, 98 (16.6%) were from urban and 494(83.4%) were from rural. The median age of mothers interviewed was 28 years, ranging from age 17 to 65years. Five hundred twenty five (88.7%) of the mothers were currently married/cohabiting with their husbands and 67(11.3%) of the mothers were currently not married (never married, divorced and widowed) during the study period. The majority of the respondents, 499(84.3%) were Orthodox in religion followed by 66 (11.1%) Protestant and others accounts 27(4.6%); five hundred two 502 (84.8%) respondents, were from Oromo ethnic group. Regarding their educational status, majority of the mothers/caregivers were primary school 295 (49.7%), followed by illiterate 225(38%).Of the total study subjects interviewed, 452(76.4%) reported the overall family size of their households were less or equal to five person.(Table3).

Table 3: Socio-demographic characteristics of mothers/caregivers (n=592) in Lume District, East Shewa Zone, Oromia Regional State, April 2018.

Variables	Frequency	Percent
Residence		
Urban	98	16.6
Rural	494	83.4
Mothers age in years		
<25 years	181	30.6
25-34 years	280	47.3
>=35 years	131	22.1
Marital status		
Currently married	525	88.7
Currently not married	67	11.3
Religion		
Orthodox	499	84.3
Protestant	66	11.1
Other	27	4.6

Table 3 continued

Ethnicity		
Oromo	502	84.8
Amhara	61	10.3
Other	29	4.9
Educational status of mother		
Illiterate	225	38.0
Primary school	294	49.7
Secondary and above	73	12.3
Educational status of Husband(n=538)		
Illiterate	114	19.3
Primary school	295	49.8
Secondary and above	129	21.8
Occupation of mother		
Farmer	26	4.4
Government employee	4	0.7
Merchant	78	13.2
House wife	413	69.8
Housemaid	10	1.7
Other	61	10.3
Family size		
<=5	452	76.4
>=6	140	23.6
Number of under five children		
1	449	75.8
>=2	143	24.2

Child health-related information

In this study of the 592 sicken children reported, 307(51.9. %) children, were in the age group of 24-59 and 161(27.2%) were in the age group of 12-23 months. The majority 333(56.3%) of children were males. (Table4).

Table 4: Age categories and sex of the sick children (n=592) in Lume District, East Shewa Zone, and OromiaRegional State, April 2018.

Variables	Frequency	Percent
Age of child in months		
<=11	124	20.9
12-23	161	27.2
24-59	307	51.9
Sex of child		
Male	333	56.3
Female	259	43.8

Of the total 592 children who had been ill with any disease in the two weeks preceding the survey, 220 (37.2%) experienced only one symptom, whereas 372(62.8%) experienced more than one symptom. Of those, 405(68.4%) were perceived as severe by the mothers/caregivers. Concerning particular symptoms experienced by the children, 421(71.1 %) experienced cough, 206(34.8%) suggestive symptom of ARI, 217(36.7%) diarrhea and 420(70.9%) fever (Table5).

Table 5: Child health-related information (n=592) in Lume District, east Shewa Zone, Oromia Regional
State, April 2018.

Variables	Frequency	Percent
Number of symptom experienced by the children		
One	220	37.2
More than one	372	62.8
Type of symptoms experienced by the children		
Cough		
Yes	421	71.1
No	171	28.9
Cough accompanied by short or difficult breathing (n=421)		
Yes	206	34.8
No	215	36.3
Diarrhea		
Yes	217	36.7
No	375	63.3
Fever		
Yes	420	70.9
No	172	29.1
Perception of severity		
Yes	405	68.4
No	187	31.6

Pattern of healthcare-seeking behavior

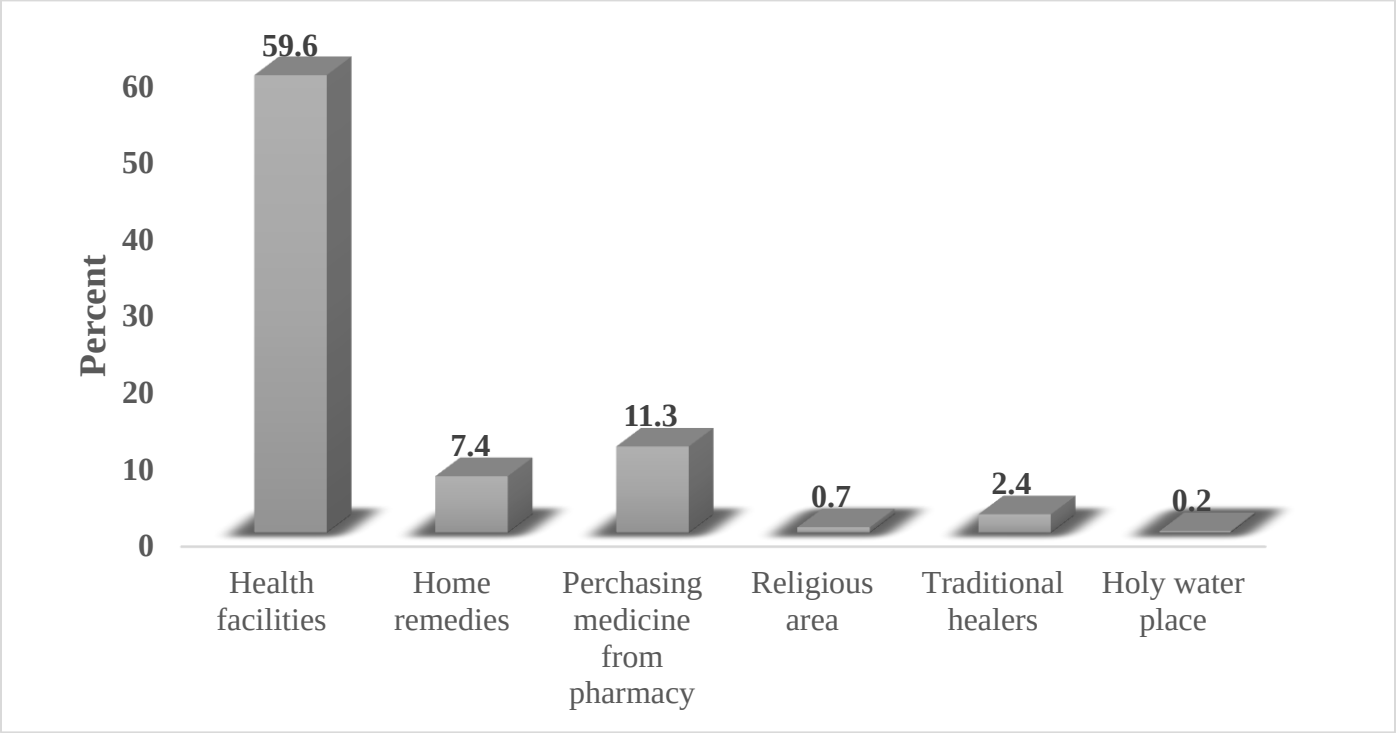
Of the 592 caregivers enrolled in this study, 550(92.9%) reported their preference sources of health care seeking for childhood illnesses was health facilities whereas religious area was the second preferred next to health facilities 35(5.9%).Traditional healer 7(1.2%) were the least preferred sources of seeking by mothers/caregivers for their sick child. Out of the 592 children who had been ill in the two weeks before the survey, any care was sought for 483(81.6%) children from health facilities, traditional healer, religious area, pharmacies and care at home but

109(18.4%) of ill children didn't get any kind treatment/help. Health facilities, 414(69.9%) were the most common sources where care was sought for the sick children. Moreover, mothers made home remedies for 10(1.7%) of sick children, purchased medicine from pharmacies 43(7.3%), sought religious area 6(1.0%), and sought traditional healer 7(1.7%) for their sick children (Table 6).Table 6: Mothers/caregivers health care seeking behavior for common childhood illnesses (n=592) inLume District, east Shewa Zone, Oromia Regional State, April 2018.

Variables	Frequency	Percent
Where do you prefer to seek advice or treatment if your child is sick? (n=592)		
Health institution	550	92.9
Religious area	26	4.4
Holy water place	9	1.5
Traditional healer	7	1.2
Did you seek any advice or treatment for your sick child? (n=592)		
Yes	483	81.6
No	109	18.4
Where did you seek advice or treatment? (n=483)		
Health facilities	414	69.9
Home remedies	10	1.7
Purchasing medicine from pharmacy	43	7.3
Religious area	6	1.0
Traditional healers	10	1.7

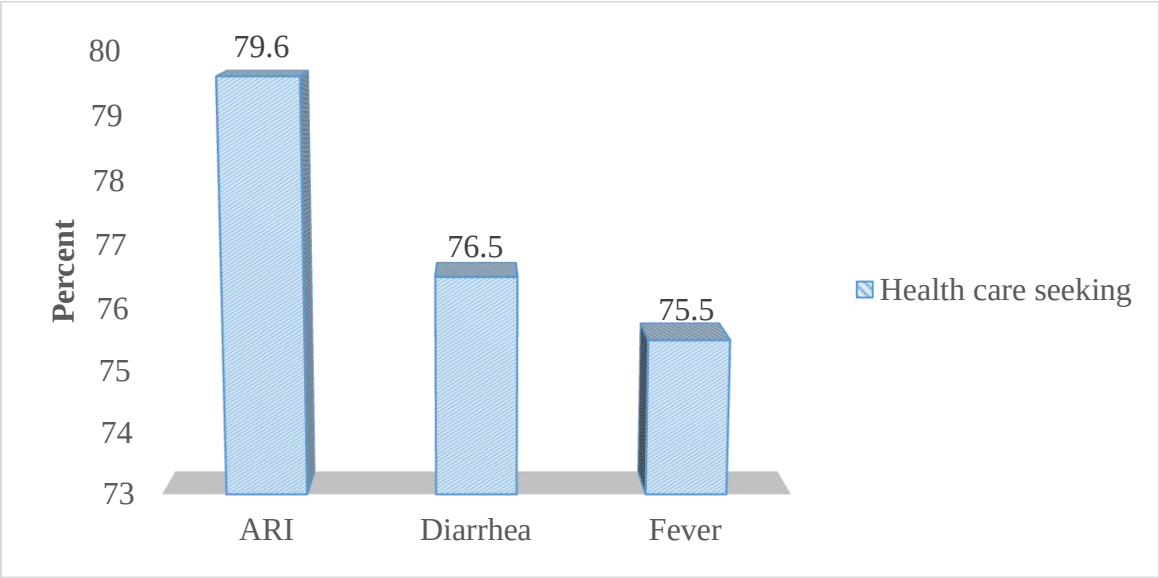
The 483 respondents who sought any care for their sick children were asked from where care was sought first. According to their report, health facilities 353(59.6) were the most common source where care was first sought followed by purchasing medicine from pharmacies 67(11.3%),whereas home remedies 44(7.4%) and traditional healer 14 (2.4%) were other sources from which care was first sought by the mothers/caregivers (Figure 3).

Figure 3: Sources where care was sought first for childhood illnesses (n=483) in Lume District, east Shewa Zone, and Oromia Regional State April 2018



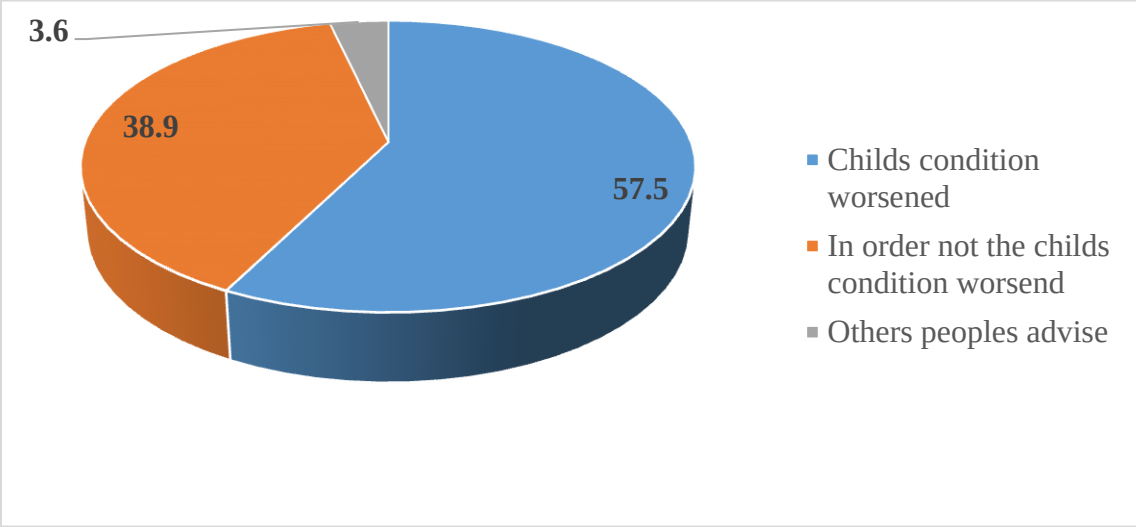
This survey also identified the magnitude of health care seeking behavior for common childhood illnesses. Of the total children presented with particular illness symptoms, more care was sought when children presented with ARI 164(79.6%) followed by diarrhea 166(76.5%) and fever 317(75.5) (Figure4).

Figure 4: Health care seeking practice reported for common childhood illnesses in Lume District, east Shewa Zone, Oromia Regional State April 2018.



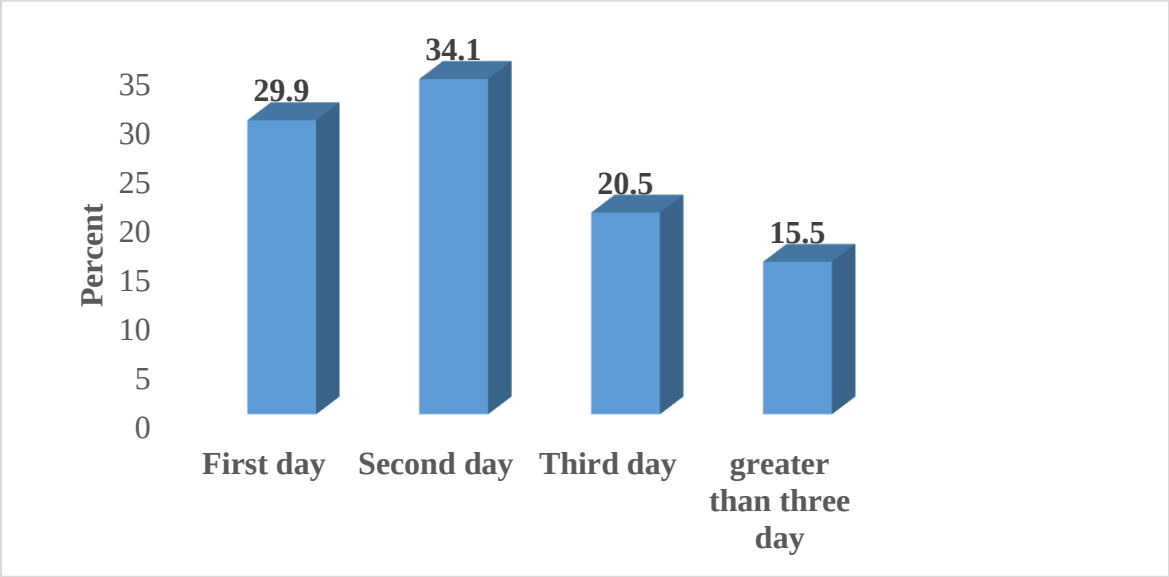
As reported by the respondents, the main reasons for visiting health facilities were child's condition worsened 238 (57.5%), in order not the child's condition worsened 161 (38.9%) and by the influence of other people 15(3.6%) (Figure5).

Figure 5: Reasons reported for visiting health facilities for childhood illnesses (n=414), Lume District, East shewa zone Oromia regional state April 2018.



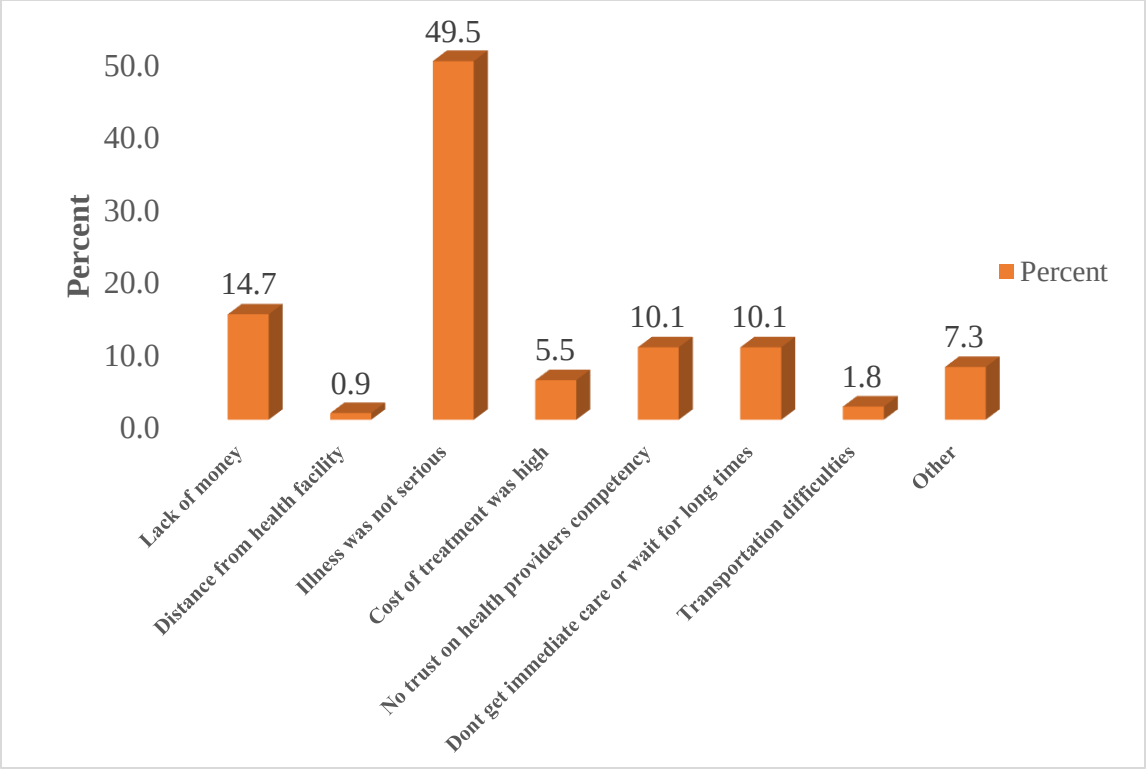
Regarding the time of care seeking, among 414 mothers who sought care from health facilities, Only 124(29.9%) sought health facilities within twenty four hour after recognition of the illnesses, while 141(34.1%), 85 (20.5%), 64(15.5%) sought health facilities after second, third and greater than third days respectively which shows more than two third health care seeking were delayed (Figure6).

Figure 6: Time of health care seeking reported after recognition of the onset of the illnesses (n=414), Lume District Ethiopia, April, 2018



One hundred nine mothers/caregivers who did not seek any care from health facility are asked for reasons. Perception that illness was not serious 54(49.5%) and lack of money16 (14.7%) were the main reasons given for failure to seek care from health facilities by the mothers. The remaining 11(10.1%) was due to no trust on health provider competency, don't get immediate care11 (10.1%), cost of treatment was high 6(5.5%), transportation difficulties 2(1.8%), distance from facility1 (0.9/%) and other 8(7.3%) (Figure 7).

Figure 7: Main reasons for not visit health facility for common childhood illnesses (n=109), Lume District, April 2018.



Factors associated with healthcare-seeking behavior for childhood illnesses

Bivariate analysis was done to identify factors influencing health care seeking behavior for childhood illnesses. The results of bivariate analysis showed that place of residence, mothers age, marital status of mother, educational status of mother, educational status of husband, family size, age of child, number of symptom, perceived severity of the disease, distance from health facility and type of symptom were significantly associated with health care seeking behavior(Table 7)

Table 7: Bivariate analysis of health care seeking behavior for common childhood illnesses (n=592) in Lume District, east Shewa Zone, Oromia Regional State, and April, 2018.

Variables	Health seeking behavior			
	Yes	No	COR(95%CI)	P-Value
Residence				
Urban	83(14.0)	15(2.5)	**2.73(1.52-4.87)***	**0.001**
Rural	331(55.9)	163(27.5)	1	
Mothers Age				
< 25years	143(24.2)	38(6.4)	**3.0(1.82-4.91)***	**<0.001**
25-34	198(33.4)	82(13.9)	**1.92(1.25-2.95)***	**0.003**
>=35 years	73(12.3)	58(9.8)	1	
Marital status				
Currently married	378(63.9)	147(24.8)	**2.21(1.32-3.71)***	**0.003**
Currently not married	36(6.1)	31(5.2)	1	
Educational status of mother				
Illiterate	114(19.3)	111(18.8)	1	
Primary school	243(41.0)	51(8.6)	**4.64(3.11-6.92)***	**<0.001**
Secondary and above	57(9.6)	16(2.7)	**3.47(1.88-6.40)***	**<0.001**
Educational status of husband(n=538)				
Illiterate	63(11.7)	51(9.5)	1	
Primary school	226(42.0)	69(12.8)	**2.65(1.68-4.19)***	**<0.001**
Secondary and above	97(18.0)	32(5.9)	**2.45(1.42-4.23)***	**0.001**
Family size				
<=5	336(56.8)	116(19.6)	**2.30(1.55-3.42)***	**<0.001**
>=6	78(13.2)	62(10.5)	1	
Age of child				
<11	86(14.5)	38(6.4)	1.09(0.70-1.72)	0.70
12-23	121(20.4)	40(6.8)	1.46(0.95-2.25)	0.084
24-59	207(35.0)	100(16.9)	1	

Table 7 continued

Number of symptom experienced by the children				
One	131(22.1)	89(15.0)	1	
More than one	283(47.8)	89(15.0)	**2.16(1.51-3.10)***	**<0.001**
Type of symptoms experienced by the children				
ARI(n=421)				
Yes	164(27.7)	42(7.1)	**2.36(1.53-3.65)**	**<0.001**
No	134(22.6)	81(13.7)	1	
Diarrhea				
Yes	166(28.0)	51(8.6)	**1.67(1.14-2.44)**	**0.008**
No	248(41.9)	127(21.5)	1	
Fever				
Yes	317(53.5)	103(17.4)	**2.38(1.64-3.46)**	**<0.001**
No	97(16.4)	75(12.7)	1	
Perception of severity				
Yes	316(53.4)	89(15.0)	**3.22(2.23-4.67)***	**<0.001**
No	98(16.6)	89(15.0)	**1**	
Distance from health facility				
<30 minutes	265(46.6)	91(16.0)	**2.50(1.45-4.30)***	**0.001**
30-60 minutes	104(18.3)	44(7.7)	**2.02(1.11-3.70)***	**0.02**
>60 minutes	35(6.2)	30(5.3)	1	

* Statistically significant at $p<0.05$ on Bivariable analysis

To identify the independent predictors of health care seeking from health facilities or providers' Multivariate logistic regression analysis was performed. The result of multivariate logistic regression analysis revealed that urban resident mothers were 3.10 times more likely to seek health care than rural resident mothers (AOR=3.10; 95%CI: 1.10-9.10).Mothers who had completed primary school education were 4.14 times more likely to seek health care than illiterate mothers (AOR=4.14; 95%CI: 2.17, 7.89) and mothers perceived their childhood illnesses was sever around three times more likely to seek health care compared to illness was mild (AOR=3.21; 95%CI: 1.62, 6.30)(Table8).

Table 8: Multivariate analysis of health care seeking behavior for common childhood illnesses (n=592) in Lume District, east Shewa Zone, Oromia Regional State, and April, 2018.

Variables	Health seeking behavior				
	Yes	No	COR(95%CI)	P-Value	AOR(95%CI)
Residence					
Urban	83(14.0)	15(2.5)	2.73(1.52-4.87)	0.001	**3.10(1.10-9.10)**
Rural	331(55.9)	163(27.5)	1		
Mothers Age					
< 25years	143(24.2)	38(6.4)	3.0(1.82-4.91)	<0.001	1.65(0.68-4.04)
25-34	198(33.4)	82(13.9)	1.92(1.25-2.95)	0.003	1.24(0.60-2.55)
>=35 years	73(12.3)	58(9.8)	1		
Marital status					
Currently married	378(63.9)	147(24.8)	2.21(1.32-3.71)	0.003	2.39(0.51-11.28)
Currently not married	36(6.1)	31(5.2)	1		
Educational status of mother					
Illiterate	114(19.3)	111(18.8)	1		
Primary school	243(41.0)	51(8.6)	4.64(3.11-6.92)	<0.001	**4.14(2.17-7.89)****
Secondary and above	57(9.6)	16(2.7)	3.47(1.88-6.40)	<0.001	2.07(0.81-5.25)
Educational status of husband(n=538)					
Illiterate	63(11.7)	51(9.5)	1		
Primary school	226(42.0)	69(12.8)	2.65(1.68-4.19)	<0.001	1.00(0.81-2.02)
Secondary and above	97(18.0)	32(5.9)	2.45(1.42-4.23)	0.001	1.13(0.48-2.64)
Family size					
<=5	336(56.8)	116(19.6)	2.30(1.55-3.42)	<0.001	1.59(0.81-3.14)
>=6	78(13.2)	62(10.5)	1		
Age of child					
<11	86(14.5)	38(6.4)	1.09(0.70-1.72)	0.70	1.34(0.64-2.79)
12-23	121(20.4)	40(6.8)	1.46(0.95-2.25)	0.084	0.88(0.47-1.67)

Table 8 continued

24-59	207(35.0)	100(16.9)	1		
Number of symptom experienced by the children					
One	131(22.1)	89(15.0)	1		
More than one	283(47.8)	89(15.0)	2.16(1.51-3.10)	<0.001	0.54(0.21-1.41)
Type of symptoms experienced by the children					
ARI(n=421)					
Yes	164(39.0)	42(10.0)	2.36(1.53-3.65)	<0.001	1.45(0.77-2.70)
No	134(31.8)	81(19.2)	1		
Diarrhea					
Yes	166(28.0)	51(8.6)	1.67(1.14-2.44)	0.008	1.78(0.85-3.72)
No	248(41.9)	127(21.5)	1		
Fever					
Yes	317(53.5)	103(17.4)	2.38(1.64-3.46)	<0.001	1.39(0.56-3.46)
No	97(16.4)	75(12.7)	1		
Perception of severity					
Yes	316(53.4)	89(15.0)	3.22(2.23-4.67)	<0.001	**3.21(1.62-6.30)****
No	98(16.6)	89(15.0)	**1**		
Distance from health facility					
<30 minutes	265(46.6)	91(16.0)	2.50(1.45-4.30)	0.001	1.27(0.56-2.91)
30-60 minutes	104(18.3)	44(7.7)	2.02(1.11-3.70)	0.02	1.51(0.60-3.77)
>60 minutes	35(6.2)	30(5.3)	1		

** Statistically significant at p<0.05 on multivariable analysis

5. DISCUSSION

This study aimed to assess health care seeking behavior and associated factors on common childhood illnesses among mothers with under five children in lume district east shoa, central Ethiopia. In this study, the overall health care seeking behavior was69.9% (95% CI :(66.0%, 74.0%)).This study also found that, mothers/caregivers healthcare seeking practices for childhood illnesses were influenced by place of residence, educational status of the mother, and their perceived severity of the illnesses.

This study found that, the actual health care seeking practices reported by mothers/care givers was less than that of their preference of health care (92.9%) for childhood illnesses. According to this study, care was sought from health facilities for 69.9% of the sick children which similar with a study done in Bahirdar (72.7%) and study conducted in Jeldu District west shoa, Oromia region (74.6%) of sick children sought care health facilities (Worku (2013), Tufa*et al.,* (2016).

The finding of this study revealed that 69.9% of mothers/caregivers with under five children who had common childhood illness sought care from health facility which was higher than study conducted in Albania and Uganda of which 64% of mothers/care givers with under five children sought health care from health facilities (Doracaj *et al.* (2015), Gerald, (2015).Whereas the result of this finding was lower than a study conducted in India Karnataka city which showed 81% of under five children with common childhood illness sought care from health facility (Yamuna *et al.,* 2017).This difference may be related to the socio-demographic characteristics like educational status, culture, economical status and study period.

In this study any health care was sought for about 81.6% for children who had been ill in the two weeks before the survey and 109 (18.4%) of ill children didn't get any kind of help/care at home, traditional healer, health facilities, holy water place, religious area and pharmacies .This result is consistent with a study done conducted in Nepal in which about 81.4% of sick children sought health care while 18.6% of sick under five children didn't sought any type of care (Shrestha, 2015).But the finding of this study was lower than a study conducted in Dhaka Bangladesh in which about 90% mothers/care givers sought health care for their sick children (Mahejabin *et al,* 2014).

Health care seeking was related to particular illness symptoms and their perceived severity according to this finding. Similar number of mothers/caregivers sought care from health facilities for 79.6%, 76.5% and 75.5% suggestive symptoms of ARI, diarrhea and fever respectively. Consistent result with this finding was reported from Jeldu district of Oromia region in which 77.6%, 81.1% and 79% with ARI, diarrhea and fever respectively were taken to health facility (Tufa *et al.,* 2016). This slight difference might be attributable to perceived severity attached to the illnesses.

According to world health organization estimates that seeking appropriate and on time care by care givers could reduce child death by 20% and community level promotion of preventive activities and prompt health care seeking is vital to tackle the problem of childhood deaths that occur at home from these illnesses, before the child reaches a health facility (Anwar *et al*, 2015). However, this study reported that, despite the frequent sought any health care (81.6%) for childhood illnesses, there were delays in seeking health care from health facility for children presented with symptoms of acute respiratory infection, fever and diarrhea. For instance, only 29.9% of the care givers sought services of health facilities for sick children within 24 hours after recognition of the illnesses and of the total who sought care from health facilities, 57.5% were initiated by worsening of the diseases. A study conducted in West Shewa, Jeldu District and Amhara region Ensaro district also reported that, seeking prompt and appropriate health care for these illnesses was delayed (Sisay *et al.*, (2015), Tufa *et al.*, (2016). In Yemen mothers/ caregivers responses with any immediate care-giving action were delayed after they recognized the suggestive symptom of common childhood illnesses, while better practice was reported in a survey conducted in the Karnataka city, India(Webair and Bin-Gouth, (2013),(Yamuna *et al.*, (2017).The possible reasons of delayed care seeking might be due to trying purchasing medicine from pharmacy first, trying traditional care, perceived the illness was not serious, lack of money at that time and the expectation of that disease would recover.

On the other hand, this study revealed that perceptions of the illnesses not being serious, lack of money were the major reasons for not seeking care from health facility. This finding is consistent with study done in Derra District, North Shewa Oromia and similar reasons were also reported in a survey conducted in Nigeria (Aigbokhaode *et al.*, (2015), Tsion*et al.,* (2008).

This study found that, on multivariable analysis there was no significant difference of the distance from nearest health facility in care seeking from health facilities which is inconsistent with what was reported from India(Yerbude *et al.*, 2017).This might be due to the availability of health posts in the kebeles.

The finding from the multivariable analysis showed that residence of mothers/caregivers (AOR=3.10; 95%CI: 1.10-9.10) was associated with health seeking behavior in which mothers who live in urban were three times more likely to seek health care than rural mothers. This might be due to the accessibility of health care and information about the importance of seeking of health care for urban mothers. This finding was consistent with study done in North West Ethiopia Bure district(AOR: 11.5, 95% CI (5.407, 24.483) and North shoa Derra district (AOR=8.99, 95%CI, 3.46, 23.1) in which mothers living in urban areas sought more health care than mothers living in rural areas.(Gelaw *et al.*, (2014),Tsion *et al.*,(2008).

In this study, educational level of mothers was found to be associated with health seeking behaviors of the mothers/caregivers. HSB was significantly higher among participants with primary level of education (OR=4.14; 95%CI: 2.17, 7.89) compared to those who were illiterate. This finding could also be supported by a similar study conducted in Nigeria, India and Mozambique, in which literate mothers sought more care than the illiterates (Adedokun, (2017),Bayham *et al.*, (2017),Yerbude *et al.*, (2017). Likewise a similar study from Yemen , discloses that mothers sought medical care significantly more when they had a higher level of school education (POR 5.85, 95% CI: 2.34–14.61)(Webair and Bin-Gouth, 2013).

In the current study, mothers/caregivers perceived illness (AOR=3.21; 95%CI: 3.21, 6.30) severe was three times more likely to seek health care than mild ones and this finding is similar to a systemic review done in developing countries, study carried out in Yemen and Kenya (mothers more likely to seek medical care when disease conditions more sever (Geldsetzer *et al.*, (2014), Webair and Bin-Gouth, (2013).Similar finding also reported from study done in Oromia west shoa jeldu district and north shoa derra district in which mothers perceived their child's illness sever was sought care three and two times more than mild's one respectively(Tufa *et al.*, (2016),Tsion *et al.*,(2008).

The finding from multivariate logistic regression analysis showed that, educational status of the husband, age of the mothers, marital status of mother, age of the children, number of symptom, type of symptom and distance were not statistically associated with health care seeking behavior for the childhood illnesses. This might be due to the narrowing of the disparities among the community by the input of health extension workers.

6. STRENGTH AND LIMITATION OF THE STUDY

7.1. Strength

- House hold census was performed to get under five children with common childhood illness before the survey.

7.2. Limitations of the Study

- The morbidity data collected are subjective because of it is based on the mother's perception of illness without validation by health personnel.

7. CONCLUSIONS

In conclusion, this study indicated that although health care was most often sought from health facilities (69.9%), considerable proportion of mothers, (30.1%) of the sick children were not taken to health facilities for care. Seeking care from health facilities was delayed; only 29.9% of the total sick children received treatment within 24 hours of the onset of illness as recognized by the mothers/caregivers. Majority of the mothers/caregivers sought care from health facilities after worsening of the illnesses. Furthermore, residence of mother's education status of the mothers, and mothers/caregivers perceptions about severity of illness were independent predictors of modern health care seeking behavior for childhood illnesses.

8. RECOMMENDATIONS

This study showed that seeking appropriate health care for childhood illnesses needs further promotional engagements. Delayed health care seeking is highly a concern. Therefore it is better to give attention for the following recommendations based on the identified gaps.

Oromia health bureau and Lume district health office

- Should work on community oriented promotion of HSB and practices by using health extension worker and by increasing mothers' participation on child health issues especially focusing on rural dwellers

Facility level

- Health institutions especially antenatal and postnatal care visits is one of the key intervention area of maternal and child health. Hence, health facility in the district should focus on creating awareness and designing detailed health education around childhood illness for under five children when mothers attend these visits.

Health care professionals

- Education, support and counseling should be given to community at large and particularly to the women regarding the importance of seeking appropriate and timely health care.

Researcher

- Should do further investigation on the timely care seeking behavior of mothers/care givers and factors related to delays.

9. REFERENCE

Aaltje Camielle Noordam, Liliana Carvajal-Velez, Alyssa B. Sharkey, Mark Young, Jochen W. L. Cals .2014.Care Seeking Behavior for Children with Suspected Pneumonia in Countries in Sub-Saharan Africa with High Pneumonia Mortality. *Plos one*, 10(2):1-14.

Abdur Razzaque Sarker, Marufa Sultana, Rashidul Alam Mahmud, Nurnabi Sheikh, Robert Van Der Meer, and Alec Morton.2016. Prevalence and Health Care–Seeking Behavior for Childhood Diarrheal Disease in Bangladesh. *Global Pediatric Health*, 3(1): 1–12.

Achamyelesh Gebretsadik, Alemayehu Worku and Yemane Berhane.2015. Less Than One-Third of Caretakers Sought Formal Health Care Facilities for Common Childhood Illnesses in Ethiopia. *International Journal of Family Medicine*, vol (2015):2-6.

Adesuwa Q. Aigbokhaode, Essy C. Isah, Alphonsus R. Isara.2015.Health seeking behavior among caregivers of under five children in Edo State, Nigeria .*SEEJPH*, 2014(41):3-9.

Almamy M. Kanté, Hialy R. Gutierrez, Anna M. Larsen, Elizabeth F. Jackson, Stéphane Helleringer, Amon Exavery, Kassimu Tani and James F. Phillips.2015. Childhood Illness Prevalence and Health Seeking Behavior Patterns in Rural Tanzania. *BMC Public Health*, 15(951):2-10.

Anwar-ul-Haq, Hameed Mumtaz Durrani, Ramesh Kumar, Salma Mumtaz Durrani .2015. Recognizing the Danger Signs and Health Seeking Behavior of Mothers in Childhood Illness in Karachi, Pakistan. *Universal Journal of Public Health*, 3(2): 49-54.

Bekele Demissie, Berhanu Ejie, Habtamu Zerihun, Zergu Tafese, Getu Gamo, Tilahun Tafese, Abera Kumie, Jemal Haider, Seifu Hagos, Adamu Addissie.2014.Assessment of healthcare seeking behavior of caregivers for common childhood illnesses in Shashogo Woreda, Southern Ethiopia. *Ethiopian journal of health development*, 28(1):38-41.

Bennett, Adam, Thom Eisele, Joseph Keating, and Josh Yukich. 2015. *Global Trends in Care Seeking and Access to Diagnosis and Treatment of Childhood Illnesses*. DHS Working Papers No. 116. Rockville, Maryland, USA: ICF International.

Catherine Kahabuka, Gunnar Kva°le, Sven Gudmund Hinderaker.2013. Care-Seeking and Management of Common Childhood Illnesses in Tanzania.*Plos one*, 8(3):2-7.

Central Statistical Agency (CSA) [Ethiopia] and ICF. 2016. *Ethiopia Demographic and Health Survey 2016*.Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF.

Christopher J L Murray.2017. Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970–2016: a systematic analysis for the Global Burden ofDisease Study. *Lancet*, 390: 1128-1129.

Debadeep Kalita, Madhur Borah, Rana Kakati, Hiyeswar Borah.2016. Primary Caregivers Health Seeking Behavior for Under-Five Children: A Study in a Rural Block of Assam, India. *National Journal of Community Medicine*, 7 (11):862-872.

Ditila Doracaj, Edi Grabocka, Elda Hallkaj and Gentian Vyshka.2015.Healthcare-seeking Practices for Common Childhood Illnesses in Northeastern Albania: A Community-based Household Survey. *Journal of Advances in Medical and Pharmaceutical Sciences*, 3(1):34 36.

Gerald M.2015. Assessing Factors Influencing Health Seeking Behavior for Malaria Treatment in Children under Five Years in Rwimi Town Council Kabarole District. *International journal of school and cognitive psychology*, 2(4):2-7.

Hana Hasan Webair Abdulla Salim Bin-Gouth.2013. Factors affecting health seeking behavior for common childhood illnesses in Yemen. *Patient Preference and Adherence*, 2013(7):1129-1138.

Indira Dey (Pal), R. N. Chaudhuri.2012. Acute Childhood Illnesses and Health Seeking Behavior among under five children in a village of Hooghly district, West Bengal *International Journal of Medicine and Public health*, 2 (2) :49-54.

Kesetebirhan Admasu, 2014.Integrated community case management of sick children in Ethiopia.*Ethiop Med J*, 52(3):129-136.

Mahejabin F1, Parveen S2, Ibrahim M3.2014. Mother's / Care Giver's Health Seeking Behavior during Childhood Illness in an Urban Slum of Dhaka city. *Pulse*, 7(1):5-15.

Maria Gabriela Silva Guimarães, AthosMuniz Braña, Humberto Oliart-Guzmán, Fernando Luiz Cunha Castelo Branco, BrenoMatos Delfino, ThascianyMoraes Pereira, Saulo Augusto SilvaMantovani, Antonio CamargoMartins, Ana Paula Santos, José Alcântara Filgueira-Júnior, Alanderson Alves Ramalho, Andreia da Silva Guimarães, Cristieli Sérgio deMenezes Oliveira,

Thiago Santos de Araujo, Carlos Hermógenes Manrique de Lara Estrada, Nancy Arróspide, and Monica da Silva-Nunes.2015. Child Health in the Peruvian Amazon: Prevalence and Factors Associated with Referred Morbidity and Health Care Access in the City of Iñapari. *Journal of Tropical Medicine*, vol (2015):1-11.

Mary Bayham, Meredith Blevins, Melanie Lopez, Omo Olupona, Lazaro González-Calvo, Elisée Ndatimana,Ann F. Green, and Troy D. Moon.2017. Predictors of Health-Care Utilization among Children 6–59 Months of Age in Zambézia Province, Mozambique. *The American Society of Tropical Medicine and Hygiene*, 96(2): 493–500.

Mohammed Baba Abdulkadir, Zainab Ajoke Abdulkadir.2017. A cross-sectional survey of parental care-seeking behavior for febrile illness among under-five children in Nigeria *Alexandria Journal of Medicine*, 2017(53):85-91.

Nilanjana Ghosh, Indranil Chakrabarti, Manasi Chakraborty, Romy Biswas.2013.Factors affecting the healthcare-seeking behavior of mothers regarding their children in a rural community of Darjeeling district, West Bengal. *International Journal of Medicine and Public Health*, 3 (1):13-14.

Olenja J. 2003.Editorial Health Seeking Behavior in Context. *East African medical journal*, 80(2):61-2.

Pascal Geldsetzer, Thomas Christie Williams, Amir Kirolos, Sarah Mitchell, Louise Alison Radcliffe, Maya Kate Kohli-Lynch, Esther Jill Laura Bischoff, Sophie Cameron, Harry Campbell.2014. The Recognition of and Care Seeking behavior for Childhood Illness in Developing Countries. A Systematic Review. *Plos one*, 9(4):5-6.

Pravin N. Yerpude, Keerti S. Jogdand1, Jay H. Shah, Kinnari B. Thacker.2017.A study of factors which determine health seeking behavior of mothers for their under five children in rural area of Gujarat. *International Journal of Community Medicine and Public Health*, 4(11):4169-4173.

Ramesh Chand Chauhan, Manikandan, Anil J. Purty, Abel Samuel, Zile Singh.2015. Determinants of Health Care Seeking Behavior. *International Journal of Scientific Reports*, 1(2):118-122.

Ronald M.Andersen .1995. Revisiting the behavioral model and access to medical care: does it matter? *Journal of Health and Social Behavior*, 36(1): 1–10.

S. Sisay, G. Endalew, & G. Hadgu.2015.Assessment of Mothers/Care Givers Health Care Seeking Behavior for Childhood Illness in Rural Ensaro District, North Shoa Zone, Amhara Region. *Global journal of life science and biological research*, 1(1):20-34.

Shrestha PD.2015. Health Seeking Behavior among Mothers of Sick Children *Nepal Health Res Counc*, 13(2): 112-5

Sulaimon T. Adedokun1, Victor T. Adekanmbi, Olalekan A. Uthman, Richard J. Lilfor.2017.Contextual factors associated with health care service utilization for children with acute childhood illnesses in Nigeria. *Plos one*, 12(3):7-9.

Theresa Diaz, Asha S George,, Sowmya R Rao, Peter S Bangura, John B Baimba,Shannon A McMahon and Augustin Kabano.2013. Healthcare seeking for diarrhea, malaria and pneumonia among children in four poor rural districts in Sierra Leone in the context of free health care: results of a cross-sectional survey. *BMC Public Health*, 13(157):1-12.

Tigist Astale, Michelene Chenault.2015. Help-Seeking Behavior for Children with Acute Respiratory Infection in Ethiopia.*PLos one*, 10(11):4-5.

Tsion Assefa,Tefera Belachew, Ayalew Tegegn, Amare Deribew.2008.Mothers' health care seeking behavior for childhood illnesses in derra district, north shoa zone, Oromiaregional state, Ethiopia.*Ethiop J Health Sci*, 18 (3):91-92.

Tufa Kolola, Takele Gezahegn, Mesfin Addisie.2016. Health Care Seeking Behavior for Common Childhood Illnesses in Jeldu District, Oromia Regional State, Ethiopia. *Plos one*, 11(10):2-8.

UN (United Nations).2013.Human Rights Council Twenty-fourth session Agenda item 3 Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development ,Study by World health organization on mortality among children under five years of age as a human rights concern. A/HRC/24/60.

WHO (World Health Organization).2016 .Towards a Grand Convergence for Child Survival and Health a strategic review of options for the future building on lessons learnt from IMNCI. WHO, Geneva, Switzerland.

WHO (World Health Organization).2017 Children: reducing mortality. WHO, Geneva, Switzerland (Fact Sheet No 178).

Worku Awoke.2013.Mothers'/caregivers' care seeking behavior in Bahir Dar, Ethiopia: A descriptive community based cross sectional study. *Open Journal of Preventive Medicine*, 3(2): 155-159.

Yalemzewod Assefa Gelaw, Gashaw Andargie Biks and Kefyalew Addis Alene.2014. Effect of residence on mothers' health care seeking behavior for common childhood illness in Northwest Ethiopia: a community based comparative cross – sectional study. *BMC Research Notes,* 7(705):3-8.

Yamuna B. N, Ratnaprabha G. K., Prakash Kengnal.2017.Prevalence of acute morbidities and their health seeking behavior among under-five children of urban slums in a city in Karnataka. *International Journal of Community Medicine and Public Health,* 4(7): 2449.

10. APPENDICES

Annex I: - Participant information sheet and informed, volunteer consent form

My name is _____ I am working as a data collector for the study being conducted in this community by Oliyad Bilbila who is studying for 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 title

Health care seeking behavior and associated factors on common childhood illnesses among mothers with under five children.

Purpose of the study

The findings of this study will have importance for the lume woreda health office and east shoa zone health office to improve child health. More over the aim of this study is to write a thesis for the partial requirement for the fulfillment of a master's degree program in general public health for the principal investigator.

Procedure and duration

I will be interviewing you using a questionnaire to provide me with pertinent data that is helpful for the study. There are 31questions to answer. The completion time of the data collection is about 20 to 25minutes, so I kindly request you to spare me this time for the interview.

Risks and benefits

In this study risk of being participating is very minimal, only taking few minutes from your time. You will not get any direct payment for the participation. However, findings may reveal important information for the local health planers.

Confidentiality

All the information you will provide us will kept confidential and placed in a secured place. I will not need to write your name or any other personal or household identification. The questionnaire will be coded to exclude any identification and the study findings will be general for the community.

Rights

Your participation in this study is fully voluntary. You have a right to participate or refuse in this study and not to answer any question if you feel uncomfortable within the data collection process.

Contact address

If you have any questions or concerns any time about the study, you can contact the concerned bodies with the following address given below.

Principal investigator Address of IHRERC

Name- Oliyad Bilbila Haramaya University

Address - Harar Health Science college Po. Box 235

Tel: 0913206562 Tel 025-6662011

E-mail oliyad.bilbila123@gmail.comCollege of Health and Medical Sciences

Declaration of informed voluntary consent

I have understood that the purpose the study, procedures, risks and benefits of participating in the study, issue of confidentiality, rights of participation and contact address for queries. 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 without any way of affecting me. Therefore, I declare my voluntary consent to participate in this study with my signature as indicated below.

Name and signature of participant _____ Date _____

Name and signature of the data collector_____ Date_____

Annex II: - Questionnaires in English version

District name _____	Kebele name _____	H. No _____	Code No _____	Date of data collection _____ E.C

Section 1: socio- demographic characteristics

No	Question	Coding categories	Skip
Q.1	Residence	Urban.....1 Rural.....2	
Q.2	Age of mothers in years	_____	
Q.3	Marital status of mother	Not married...1 Married.....2 Divorced.....3 Widowed.....4	
Q.4	Religion	Orthodox.....1 Protestant.....2 Others.....3	
Q.5	Ethnicity	Oromo.....1 Amhara.....2 Other..... 3	
Q.6	Educational status of mother	Unable to read and write…1 Read and write……...2 Primary school……...3 Secondary school……..4 Certificate course……..5 Diploma and above……...6	
Q.7	Educational status of husband	Unable to read and write…1 Read and write……..2 Primary school……3 Secondary school……..4	

		Certificate course……..5 Diploma and above……...6 I don't know……7	
Q.8	Occupation of mother	Farmer……...1 Government employee...2 Merchant.....3 House wife....4 Housemaid....5 Other…….6	
Q.9	Family size per household	_____	
Q10	Average monthly income of the household	_____ET. Birr	
Q11	Number of under-five children per mother	_____	
Section2. Socio-demographics, and health-related information of sick child			
Q12	Age of child in months	_____	
Q13	Sex of the child	Male .....1 Female.....2	
Q14	Number of symptoms he/she has had at any time in the last 2 weeks?	One.....1 Two and above...2	
Q15	Has had an illness with a cough at any time in the last 2 weeks?	Yes....1 No.....2 →	Q17
Q16	When had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing?	Yes....1 No.....2	
Q17	Has had diarrhea in the last 2 weeks?	Yes....1 No.....2 →	Q19
Q18	Was there blood in the stool?	Yes....1 No.....2	
Q19	Has had illness with a fever at any time in the Last 2 weeks? (by history or feels hot)	Yes....1 No.....2	
Q20	According to your perception, how sever was your	Sever……1	

	child illness.	Moderate……..2 Mild……..3	
21	How do you identified the severity of illness on your child?	By combined symptoms of the Disease…….1 Child refused to eat ….....2 The illness continue for long time…3 Others specify…….4	
Section3. Information about health care seeking behavior of mother/caregivers for sick child.			
Q22	According to this area sick child often taken to?	Health institution…….1 Religious area……..2 Holy water place……..3 Traditional healer…....4 I don't know……....5	
Q23	According to you where do you prefer to seek advice or treatment if your child is sick?	Health institution…….1 Religious area……..2 Holy water place……..3 Traditional healer…….4	
Q24	Did you seek any advice or treatment for your sick child?	Yes....1 No.....2 →	Q29
Q25	Where did you seek advice or treatment?(circle all the apply)	Health facilities.....1 At home ….....2 Purchasing medicines from Pharmacy.....3 Religious area.....4 Traditional healers.....5 Holy water place.....6	
Q26	Where did you first seek advice or treatment?	Health facilities.....1 Home remedies….....2 Purchasing medicines from Pharmacy.....3 Religious area.....4	

		Traditional healers.....5 Holy water place.....6	
Q27	Main reason for visiting health facility?	Child's condition worsened.1 In order not the Child's condition worsened …….2 Other peoples' advise.....3	
Q28	Time of health seeking after onset of the illness?	First day.....1 Second day.....2 Third day…. ….....3 >3 day……..4	
Q29	Main reason for not visit health facility?	Lack of money.....1 Distance from health facility……..2 Illness was not serious.....3 Cost of treatment was high…….4 No trust on health provider's competency……5 Don't get immediate care or wait for long times……...6 Transportation difficulties……..7 Other specify …….8	
Section 4. Information about health facility.			
Q30	Is there any health facility you know in this area?	Yes.....1 → Q31 No.....2 → End	
Q31	On average how much time does it take to reach the nearest health facilities from your house?	<30 minutes on foot .....1 30-60 minutes on foot.....2 > 1 hour on foot.....3	

Thank you

Name of data Collector_____ Signature _____

Name of supervisor_____ Signature_____

Annexes III: Participant information sheet and voluntary consent (Afaan Oromo version)

Ibsa waraqaa hirmaattotaa fi feedhumaa isaani ibsu

Maqaan Koo Obbo/Aadde ---------- jedhama. Qoánnoo hawaasa kana kessattii gaggefamuu irrattii oddefannoo sassaabaa obbo Oliyaad Bilbilaa barataa digrii lammaffaa yunivarsiitii haramaayaa koollejjii saayinsii fayyaa ta'een hojadha. Haala qoánnoo kanaa fi hirmaannaa keessani akkan isiinii ibsuuf yeroo muraasaaf akka na dhagefattan kabaajan isin gaafadha.

Mata-duree qorannoo:.Haati ykn gudifituun daa'ima dhukkubsatteef wala'ansaa gootu irratti fi wantoota dhukuba kana walin hidhata qaban kan ummataa Aanaa lumee irratti adeemsisuudha.

Kayyoo qorannoo kanaa: Kaayyoon qo'annaa kanaas dhibeewwan naannoo kanatti baay'inaan Daa'ima hubaa jiran furuu fi fayyaa daa'immanii fooyyesssuuf dha. Kara biroon immoo qoraataa kuni waaraqaa qorrannoo kana dhiyeesse akka fayyaa haawasumaan digiiri lamaffaatin eebbifaamuf gargaara.

Adeemsa qorannoo fi yeroo: Gaffilee bareeffamani naaf kennaman kanani gaaffi fi deebi waalin tasaasifnu kuni qorannoo kanaaf bu'a qaba. Gaffilee 31 qofatu jiruu, gaffilee kana daqiqaa 20 hanga 25 keessatti ni xumurra. Kanaafuu yeroo xiqqoo kana akka naaf gummachitani kabajaan isin gafaadha.

Midhaa fi bu' aa qorannichaa: Midhaan qorannoo kana irraa nama mudaachu danda'u yeroo keessan xiqqoo kan fudhaatu irra kan hafee baay'ee xiqqoo dha.Qorannoo kana irratti hirmaachu keessanif kaffaltin addaa isinif kaffalaamu hin jiru. Garuu argannoon qorannoo kana irraa argamuu ummataa fi karoorsituu fayyaa nannoof odeeffannoo gaagaaruu ni kenna.

Eeggannoo odeffannoo fi hirmaatootaf godhamu: Odeffanoon keessani nama kamifuu dabarfamee hin kennamu. Odeeffanoon kamiyyu eenyumaa hirmaatoota kan addaa basuu hin jiru. Tokkoon tokko hirmaatoota kophaa isaani bakka namni odeffannoo isaan hin dhageenyetti gaaffi fi deebii godhuu.Gaffileen hirmaatotni gafaataman hunduu maqaa hirmaatotaa akka qabanneef koodii godhamani jiru. Afaaninis ta'e bareeffamani kan hirmaatotaa qorannoof wabii godhamuu hin jiru.

Mirgaa hirmaatoota: Hirmanaan qorannoo kanaf godhamuu hunduu fedhii hirmaatotatin qofa. Qorannoo kana irratti hirmaachuf yookin dhisuuf mirgaa guutu qabdani. Yoo qorannoo kana

irratti hirmaatani, yeroo kamittu gaffi fi deebi kana addaan kuutuf mirgaa qabdu. Sababi addan kuutanif waanti midhaani isinirra gahuu yookin bu'aan isin dhabdaani gonkumaa hin jiru. Bakka deebi kennu hin barbaadneetti deebi kennu dhisuun ni danda'ama.

Teessoo qunnamtiif: Yoo gaaffi dabalataa qabaatanif yeroo kammiyyuu teessoo armaan gadiitin nuu qunnamuu dandeessu. Qorataa jalqaabaa: obbo **Oliyaad Bilbilaa**, lakkofsa mobaayila; **09 13 20 65 62** yookin kara iimeelitin oliyad.bilbila123@gmail.com qunnamuu dandeessu. Yookin **koree saakkataatuu namuusa fi namummaa qorannoo fayyaa kan yunivarsiti haramayaa** lakkoofsa bilbilaa, 025-6662011; lakkofsaa sanduqaa postaa **235**, Yunivarsitii Haramayaa Harar Itiiyoophiyaa.

Mirkaannessa yaada feedhumaan hirmaachuf itti himamee

Yaadoolee armaan olitti dubbiseef yookin natti himaamef, ani akka gaaritti waa'ee kaayyoo qorannoo kanaa, adeemsa fi yeroo qorannoo kanaa, midhaa fi bu'aa qorannoo kanaa, eeggannoo odeeffannoo fi hirmatootaaf godhamuu, mirgoota hirmaatota fi tessoo qunnamiti qorannoo kana addaa bafaachu kootif. Akkasumas bakka naaf hin gaalle irratti gaaffi akkan gafaadhuf carraa akkan qabuu fi yeroon barbaadeetti gaaffi fi deebii addaan kuutu akkan danda'u, gaaffi deebi kennuf hin barbaanneef irraa darbuu akkan qabuu sirritti addaan baafadhee jira.Kanaafuu qorannoo kana irratti hirmaachuf yaada fedhuummaa kootii mallattoo kiyyan ni mirkaannessa.

Maqaa fi mallattoo hirmaata/ttu----------Guyyaa----------

Maqaa fi mallattoo odeeffanno sasaabduu----------Guyyaa----------

Annex IV. Questionnaires in Afaan Oromo version

Maqaa Aanaa _____	Maqaa Gandaa _____	Lakk Manaa _____	Koodii Gaffii _____	Guyyaa sassaabbii ragaa _____

Kutaa1. Oddefannoo walii galaa

Lak.	Gaafilee	Filannoo	
G1	Bakki jireenyaa kee eessa?	Magaalaa.....1 Baadiyyaa.....2	
G2	Umuriin kee waggaa meeqa?(kan haadhaa / guddifituu da'imaa)	_____	
G3	Haalli fuudhaa fi heerumaa kee maali?(kan haadhaa/guddifituu da'imaa)	Kan hin heerumne....1 Kan heerumte.....2 Kan walhiikan.....3 Kan irraa du'e.....4	
G4	Amantaa kam hordofaa jirtaa?	Ortodoksii.....1 Proteestantii.....2 Kan biroo.....3	
G5	Sabummaan kee maali?	Oromoo.....1 Amaaraa.....2 Kan biroo.....3	
G6	Sadarkaa barumsaa Kan haadhaa ykn Guddifituu?	Barressu fi dubbisuu hin danda'u…1 Barressufdubbisuudandaúu……....2 Sadarkaa tokkoffaa..…….……3 Sadarkaa lammaffaa…..……..4 Sartifikkettii……...……..5 Dipiloomaa fi isaa ol……...…….6	
G7	Sadarkaa barumsaa kan abbaa manaa?	Barressu fi dubbisuu hin danda'u…1 Barressufdubbisuudandaúu……....2 Sadarkaa tokkoffaa..…….……3 Sadarkaa lammaffaa…..……..4 Sartifikkettii……...……..5	

		Dipiloomaa fi isaa ol……..…….6 Hin beeku…….7	
G8	Hojiin kee maali? (kan haadhaa/ guddifituu da'imaa)	Qotee bultuu……...1 Hojjetuu mootummaa...2 daldaaltuu.....3 Haadha manaa.....4 Hojjetuu manaa…….5 Kan biroo…….....6	
G9	Bay'ini matii mana kessan keessa jiraatan Meeqa?	_____	
G10	Giddugaleessi galii ji'aan argattan qarshiidhaan Hammam ta'a?	Qar._____	
G11	Daa'ima waggaa shanii gadii meeqa qabda? (kan haadha tokkoo qofa)	_____	
Kutaa2. Odeeffannoo walii galaa fi fayyaa kan daa'ima dhukkubsattee			
G12	Umuriin daa'ima dhukkubsatee/ttee ji'aan meeqa?	_____	
G13	Saalli daa'ima kanaa maali?	Dhiira .....1 Dhalaa.....2	
G14	Daa'imni kun yeroo dhukkubsachaature/turte mallattoo meeqa agarsiisaature/turte?	Tokko……1 Lamaa ykn lamaa ol...2	
G15	Ni qufaasisaa?	Eeyyen....1 Lakki.....2 →	Q17
G16	Gaaffiin 15 eeyyen yoo ta'e niargansiisaa ykn afuura kutaa?	Eeyyen....1 Lakki.....2	
G17	Mucaan kee kun torban 2 asi dhibeealbaatiitiin qabamee beekaa/tii?	Eeyyen....1 Lakki.....2 →	Q19
G18	Albaatii isaa/ishii keessa dhigni nijiraa?	Eeyyen....1 Lakki.....2	
G19	Mucaan kee kun torban 2 asi dhibeeqaama ho'isuun/gubuun qabamebeekaa/tii?	Eeyyen....1 Lakki.....2	
G20	Akka ilaalcha keetti Dhukkubni daa'ima keetii kam	Oláanaa……..1	

	kessattii ramadama?	Giddugalessa.....2, Gadanaa…….3	
G21	Dhukubni daa'ima kessanii itti caaluu akkamitti beektaa?	Mallatoolee hedduu yoo irratti mul'atee….1 Nyaata yoo didee……..….2 Mallatoon dhukubaa yoo irra turee…….....3 Kan biroo ibsi……4	
Kutaa 3. Odeeffannoo haati/ guddifituun daa'ima dhukkubsateef/tteef mana yaalaa fayyadamuu gootu			
G22	Akka naannoo kanaatti daa'imman yeroo dhukkubsatan irra caala garamitti geeffamu?	Mana yaalaa/gara ogeessi fayyaa jirutti……...1 Gara mana amantaatti….2 Gara xabalaatti……....3 Gara warra mala aadaatiin yaalaniitti…4 Hin beeku……5	
G23	Akka yaada mataa keetti mucaan kee yoo dhukkubsate garamitti geessu filatta?	Mana yaalaa /gara ogeessi fayyaa jirutti…1 Gara mana amantaatti….2 Gara xabalaatti……3 Gara warra mala aadaatiin Yaalaniitti…4	
G24	Mucaan kee dhukkubsate/tte tajaajila waldhaansa Argateeraa/tii?	Eeyyen....1 Lakki.....2 →	G29
G25	Gaaffiin 24'n eyyeen yoo ta'e eessaa argate/tte?	Mana yaalaa.....1 Manattan gargaarsa godheef……2 mana farmaasii .....3 mana amantaa .....4 warra naannootti yaalan.....5	
G26	Jalqaba eessa geessite?	Mana yaalaa.....1 Manattan gargaarsa godheef.....2 Mana farmaasii .....3 Mana amantaa .....4 Warra naannootti yaalan……..5	

G27	Sababa mana yaalaa geessiteef?	Dhukubni waan itti cimeef……..1 Dhukubni akka itti hin cimeef…….2 Gorsa nama birootiin.....3	
G28	Erga dhukkusatee /ttee guyyaa meeqaffaatti mana Yaalaa geessite?	Guyyaa1ffaa.....1 Guyyaa2ffaa……...2 Guyyaa 3ffaa……3 Guyyaa 3 ol …….....4	
G29	Sababa mana yaalaa hin geessineef inni guddaan maali?	Qarshii waan hin qabneef...1 Manni yaalaa fagoo waan ta'eef…...2 Dhukkubni hamaa waan hin taaneef...3 Gatiin ittin yaalan mi'aa waan ta'eef….4 Amantaa hojatota irratti waan hin qabneef……..5 Dafe tajaajila hin argannee /yeroo dheraa eega……6 Rakkoo geejibaa……7 Kan biroo……8	
Kutaa4. Odeeffanno waa'ee mana yaalaa			
G30	Manni yaalaa ati beektu naannoo kana kessa jiraa?	Eeyyen.....1 → G 31 Lakki.....2 → Xum	
G31	Tilmaaman mana kee irra mana yaalaa sitti dhihoo jiru bira ga'uuf hagam fudhata? (adeemsa miilaatiin)	Daqiiqaa 30 gadi.....1 Daqiiqaa 30 -60.....2 Sa'aatii 1 ol.....3	

Galatoomaa

Maqaa sassaabaa ragaa_____ Mallattoo_____

Maqaa Supparvaayizaraa_____ Mallattoo_____

Annex - V. Information sheet and consent form (Amharic version)

የ ምር ምር/ጥና ት/ ተሳ ታፊ ማብራሪ ያና የ ስ ምም ት ቅጽ.

እኔ ---------- እ ባ ላ ለ ው ፡ የ ሃ ረ ሚያ ዩ ን ቨ ር ሲ ቲ ማ ስ ት ሬ ት ዲ ግ ሪ ተ ሚ ሪ የ ሆ ነ ው አ ሊ ያ ድ ቢ ል ቢ ላ በ ዚ ህ ህ ብ ረ ተ ሰ ብ ው ስ ጥ ለ ሚ ያ ደ ረ ገ ው ጥ ና ት በ ሚ ጃ ሰ ብ ሳ ቢ ነ ት እ የ ሰ ራ ው ነ ው ፡ የ ዚ ህ የ ምር ምር ቅ ጽ እ ና የ እ ር ሰ ዎ ተ ሳ ት ፎ ን በ ሚ ሞ ላ ከ ት ማ ብ ራ ሪ ያ እ ን ድ ሰ ጦ ት ለ ጥ ቂ ት ጊ ዜ እ ነ ዲ አ ዳ ም ጡ ኝ በ አ ክ ብ ሮ ት እ ጠ ይ ቃ ለ ው ፡

የ ጥ ና ቱ ር ዕ ስ፡ -እ ና ቶ ች/ተ ን ከ ባ ካ ቢ ዎ ች ል ጆ ቻ ቸ ው ሲ ታ ሚ ሞ ላ ህ ክ ም ና ያ ላ ቸ ው የ ጡ ፍ አ ጠ ባ በ ቅ ፍ ላ ጎ ት አ ና ተ ያ ያ ዥ ሁ ኔ ታ ዎ ች ን በ ሉ ሜ ወ ረ ዳ የ ሚ ካ ሄ ድ ጥ ና ት ነ ው፡ ፡

የ ምር ምር/ፕ ሮ ጀ ክ ቱ ዓ ላ ማ - በ ሉ ሜ ወ ረ ዳ እ ና ቶ ች ል ጆ ቻ ቸ ው ሲ ታ ሚ ሞ ው ደ ህ ክ ም ና የ ሚ ይ ወ ስ ዱ በ ት ን ም ክ ን ያ ት ሚ ው ቅ ና ያ ላ ቸ ውን የ ጤ ና አ ጠ ባ በ ቅ ግ ን ዛ ቤ ሜ ጨ ሚ ነ ው ፡ በ ተ ጨ ማ ሪ የ ጥ ና ቱ ዓ ላ ማ በ ህ ብ ረ ተ ሰ ብ ጤ ፍ የ ማ ስ ት ሬ ት ዲ ግ ሪ የ ሙ ሪ ቂ ያ ፅ ህ ፍ ነ ው ፡

የ ጥ ና ቱ ሂ ደ ት እ ና ጊ ዜ፡ -ለ ጥ ና ቱ በ ተ ዘ ጋ ጀ ው ጥ ያ ቄ ማ ነ ረ ት ቃ ላ ሞ ት ይ ቅ የ ሚ ደ ር ግ ሎ ት ሲ ሆ ን እ ር ሶ የ ሚ ጡ ኝ ማ ለ ስ ለ ጥ ና ቱ ው ጤ ት ጠ ቃ ሚ ነ ው ፡ ይ ህ ማ ኪ ይ ቅ 31 ጥ ያ ቄ ዎ ች ን የ ያ ዘ ሲ ሆ ን ቃ ለ ም ል ል ሱ ከ 20-25 ደ ቂ ቃ ብ ቻ የ ሚ ወ ስ ድ ይ ሆ ና ል ፤ ስ ለ ዚ ህ ይ ህ ን ን ጌ ዜ ለ ቃ ለ ም ም ል ል ሱ እ ነ ዲ ሰ ጡ በ አ ክ ብ ሮ ት እ ጠ ይ ቃ ለ ው ፡

የ ጥ ና ቱ ጥ ቅ ም አ ና ጉ ዳ ት፡ -በ ዚ ህ ጥ ና ት ማ ሳ ተ ፍ ዎ ት ን ሽ ጊ ዜ ዎ ን ሊ ሻ ማ ብ ዎ ይ ች ል ሆ ና ል እ ን ጂ ም ን ም ዓ ይ ነ ት ስ ጋ ት (ች ግ ር) አ ያ ጋ ጥ ም ዎ ት ም ፡ በ ዚ ህ ጥ ና ት በ ማ ሳ ተ ፍ ዎ በ ቀ ት ታ የ ሚ ያ ገ ኙ ት ጥ ቅ ም ባ ይ ኖ ር ም እ ር ስ ዎ በ ሚ ሰ ጡ ት ሚ ጃ ለ ጥ ና ቱ አ ስ ተ ወ ጽ አ ያ ደ ር ጋ ል ፤ እ ነ ዲ ሁ ም ሚ ጃ ው ለ አ ከ ባ ቢ ው እ ቅ ድ አ ው ጬ ዎ ች ይ ረ ዳ ል፡ ፡

የ ሚ ጃ ው ሚ ስ ጥ ራ ዊ ነ ት፡ - እ ር ሶ ሚ ሰ ጡ ኝ ሚ ጃ ማ ሉ በ ማ ሉ ሚ ስ ት ራ ዊ ነ ቱ የ ተ ጠ በ ቀ ነ ው እ ነ ደ ዚ ሁ ም ደ ህ ን ነ ቱ ተ ጠ በ ቆ ይ ቀ ማ ጫ ል፡ ፡ በ ማ ስ የ ቁ ላ ይ ስ ም ዎ ወ ይ ም አ ድ ራ ሻ ዎ ት አ ይ ፃ ፍ ም ፡ ማ ን ይ ቁ በ ኮ ድ የ ሞ ቋ ማ ጥ ሲ ሆ ን በ ጥ ና ት የ ሚ ገ ኝ ው ጤ ት ለ አ ጠ ቃ ላ ይ ሁ ብ ረ ተ ሰ ብ የ ሚ ከ ቅ ም ይ ሆ ና ል፡ ፡

የ ተ ሳ ታ ፊ ው ጥ ቅ ም፡ -የ ዚ ህ ጥ ና ት ተ ሳ ታ ፊ ነ ት ማ ሉ በ ማ ሉ በ ፍ ቃ ደ ኝ ነ ት ላ ይ የ ተ መ ሰ ረ ተ ነ ው ፡ በ ዚ ህ ጥ ና ት ያ ለ መ ሳ ተ ፍ ፤ እ ን ደ ዚ ሁ ም የ ሚ ይ ፈ ል ጉ ት ጥ ያ ቄ ያ ለ መ ሞ ላ ስ ወ ይ ም ማ ኪ ይ ቁ ጥ ሩ ስ ሜ ት ካ ል ፈ ጠ ረ ብ ዎ የ ሞ ቋ ረ ጥ ሞ ብ ቶ የ ተ ጠ በ ቀ ነ ው ፡

አድራሻ፡- በጥናቱዙሪያማንኛውምጥያቄካሎዎትሚከተሉት አካላትን ማገገር ወይም ሚጃ ማከየቅ ይችላሉ፡ ፡

<u>የወና ተሚራሚ አድራሻ</u> **<u>የዩንቨርሲቲውምርምር ኮሜቴ አድራሻ</u>**

ስምኦሊያድቢልቢላሃረማያ ዩንቨርሲቲ

አድራሻ ሞጆፖ.ሳ.ቁ 235

ስ.ቁ: <u>0913206562</u>ስ.ቁ<u>025-6662011</u>

ኢሜይል፡- oliyad.bilbila123@gmail.comሀረር ጡፍ ሳይንስ ኮሌጅ

የጥናቱተሳታፊ ስለሚሆን ሚጋገጫ

ከላይ ለተገለፁልኝ ሀሳቦች ስለ ምርምርፕሮጀክቱዓላማ፤ የጥናቱ ሂደት እና ጊዜ፤ የጥናቱ ጥቅም እና ጉዳት፤ የሚጃው ሚስጥራዊነት እና ስለተሳታፊነት ማብት ተረድቻለው፡ እዚህ ጥናት ላይ ያለምንምተፅኖ አለማሳተፍ ፤ የሜቋረጥ ወይምየሜልፈልገውጥያቄ አለመመለስ ማብት እንዳለኝ አውቄያለው፡ስለዚህ በዚህ ጥናት ላይ በፍቃደኝነት ለማሳተፍ በፊርማዬ አረጋግጣለው ፡

የጥናት ተሳታፊ ስምና ፊርማ---------- ቀን----------

የሚጃ ሰብሳቢውስምና ፊረማ---------- ቀን----------

የ ወረዳ ውስ ም ----------	የ ቀበ ሌ ውስ ም ----------	የ ቤት ቁ ጥር ----------	ጥ.ከ ድ ----------	ሚ ጃ ማ ክ ብሰ ቢ ያ ቀ ን ----------
ክ ፍ ል አ ን ድ፤ የ ተ ጠ ያ ቂ ው ን አ ጭ ቃ ላ ይ ሚ ጃ ን በ ተ ማ ላ ክ ተ				

Annex VI. Questionnaires in Amharic version

ተ.ቁ	ጥያቄ	አማራጮችስ	እለፍ
ቁ.1	ሞሪያሽ/ክየትነው	ከተማ.....1 ገጠር 2	
ቁ.2	የእናትየዋእድሜክንትነው?	_____	
ቁ.3	የአሁንየትዳርሁኔታ	ያላገባች.....1 ያገባች.....2 የፈታች .....3 ባሌየሞተባት.....4	
ቁ.4	የትኛውዛይሞትተከታይነዎት?	አርቶዶክስ .....1 ፕሮቴስታንት.....2 ሌላ 3	
ቁ.5	ብሄርዎትምንድነው?	አሮሞ.....1 አማራ.....2 ሌላካለይጥቀሱ 3	
ቁ.6	የትምህርትደረጃዎት?	ማንባብእናማፍአልችልም...1 ማንባብእናማፍበቻ.....2 አንደኛደረጃ.....3 ሁለተኛደረጃS.....4 ሰርተፍኬት.....5 ዲፕሎማእናከዛበላይ.....6	
ቁ.7	የባለቤትዎትምህርትደረጃ	ማንባብእናማፍአልችልም...1 ማንባብእናማፍበቻ.....2 አንደኛደረጃ.....3 ሁለተኛደረጃ.....4 ሰርተፍኬት.....5 ዲፕሎማእናከዛበላይ.....6 አላውቅም..... 7	
ቁ.8	ዋናሥራዎምንድንነው?	አርሶአደር .....1 የመንግስትሰራተኛ .....2 ነጋዴ.....3 የቤትእመቤት.....4 የቤትሰራተኛ .....5 ሌላካለይጥቀሱ 6	
ቁ.9	አጭቃላይየቤተሰብብዛት	_____	
ቁ.10	የወርጡቅላላገቢዎስንትነው?	_____ኢት.ብር	
ቁ.11	ከአምስትአሞበታችስንትህፃንአሌወት	_____	

ክፍልሁለት፤ አጠቃላይሚጃእናየህፃኑጤንነ ትሁኔ ታበተማላከተ			
ቁ.12	የልጅዎእድሜክወርስንትነ ው?	_____	
ቁ13	የልጅዎፃ ታምንድነ ው?	ወንድ .....1 ሴት.....2	
ቁ14	በባለፈውሁለትሳምንትልጅበታመሚ ዜስንትአይነ ትየህመምምልክትአዩበት?	አንድ.....1 ሁለትእና ከሁለትበላይ…2	
ቁ15	በባለፈውሁለትሳምንትየሳልምልክትታይቶበትነ በር?	አዎ.....1 አይደለም.....2 →	ቁ17
ቁ16	ልጅትበሚከልበትጊዜቶሎቶሎየ ሙትንፈስ፤ ከተለመ ደውአተነ ፋፈስየተለየ፤ ወይምሞ ሙትንፈስችግርይ ታይበትነ በር?	አዎ.....1 አይደለም.....2	
ቁ17	በባለፈውሁለትሳምንትልጅበታመሚ ዜተቅማጥታይ ቶበትነ በር?	አዎ.....1 አይደለም.....2 →	Q19
ቁ18	ተቅማጥውስጥደምነ በረው?	አዎ.....1 አይደለም.....2	
ቁ19	በባለፈውሁለትሳምንትልጅበታመሚ ዜትኩሳትታይ ቶበትነ በር?	አዎ.....1 አይደለም.....2	
ቁ20	በእርስዋእይታየልጅዋየህመምስሜት ከየትኛው ክፍል ይሚጀባል?	ከፍተኛ ……3 መካከለኛ ….2 ዝቅተኛ …….3	
ቁ21	የልጅዋየህመምስሜት እየተባባሰሚሆኑንበምንያውቃሉ?	ብዙየህመምምልክቶችንሲያዩ ….1 ህጻኑመማ ብሲያቆም…… …..2 የህመምስሜቱብዙ ጊዜ ሲቆይ……3 ሌላይጥቀሱ.....4	
ክፍል ሶስት፡ የህክምና እርዳታፍላጎትን በተማላከተ			
ቁ.22	በዚህአከባቢየ ታመመህፃንአብዛኛውንጊዜዬትነ ው ሚወሰደው?	የጡፍ ተቋም……1 የሃይሞትተቛም……..2 ፀበል ……..……..3 የባህልሃኪም…...4 አላውቅም……...5	
ቁ.23	እንደአርሶህሳብልጅሲታመምብዎትምር ጭውትዬትነ ው?	የጡፍ ተቛም…….1 የሃይሞትተቛም……..2	

		ፀበል ……..……..3 የባህልሃኪም…...4 አላውቅም……...5	
ቁ.24	ለታመመውልጆትምክርወይምህክምናእርዳታአግኝተዋል?	አዎ.....1 አይደለም.....2 →	Q29
ቁ.25	ምክርወይምህክምናእርዳታከዬትነውያገኙት(የሚከቀሜትንሁሉያክብቡ)	ከጤፍተቋም……1 የቤትውስጥህክምናማከጠት..2 ሞድሀኒትከፋርማሲመግዛት.....3 ወደሃይማኖትተቋምመውሰድ….4 ወደባህልህክምናመውሰድ…….5 ወደፀበልቦታመውሰድ…….6	
ቁ.26	መጀሚያምክርወይምህክምናእርዳታከዬትነውያገኙት?	ከጤፍተቋም……1 የቤትውስጥህክምናማከጠት..2 ሞድሀኒትፋርማሲላይገዝቶመውሰድ…3 ወደሃይማኖትተቋምመውሰድ….4 ወደባህልህክምናመውሰድ….5 ወደፀበልቦታመውሰድ…….6	
ቁ.27	ወደጤፍተቋምየወሰዱበትምክንያት	የህማማክመጨስለተባባሰ ……1 የህማማክመጨስላልተባባሰ ……..2 በሌላሰውምክር …...……3	
ቁ.28	ልጆሲታመምወደህክምናበስንተኛውቀንወሰዱት?	የመጀሚያውቀን …….1 ሁለተኛውቀን ……..…2 ሶስተኛውቀን ……3 ከሶሰትቀንበሆላ ……..4	
ቁ.29	ልጅዎታሞነበረበትስአትወደህክምናተቋምያሌሄዱበትምክንያትምንድንነው?	ለህክምናየሚሆንገንዘብስለሌኝ .1 የጤፍተቋምርቀትሰላለው……2 የህመማክመጨዝቅተኛስሌሆነ ….3 ህክምናውውድስለሆነ ……..…….4 በጤፍባለሞያ ላይ እምነ ትማጣት……..5 ህክምና ቶሎአለማግኘት……..6 የሜጓጓዣ ችግር ……..7	

		ሌላ ግለፅ ……...8	
ክፍል 4፤ ስለጡት ተቋማሚ ጃ			
ቁ.30	በዚህ አከባቢ የ ሚያ ውቁትየ ጡት ተቋምአ ለ?	አ ዎ.....1 አ ይደለ ም.....2	ጥ.ቁ31 ሜጩፈ ሻ
ቁ.31	በአ ማካኝ ከቤቶቅር ብያ ለጡት ተቋምላ ምድረ ስ ምን ያ ህል ጊ ዜይወስ ዳል?	ከ 30 ደቂ ቃበ ታች በእ ግር .....1 ከ 30-60 ደቂ ቃ በእ ግር ...…….....2 ከ 1 ሰ ኣ ትበ ላይበ እ ግር ……....3	

አ ጣሳ ግና ላ ው

የ ሚ ጃ ሰ ብሳ ቢ ስ ም _____

ፊር ማ_____

የ ሱፐር ቫ ይዘ ር ስ ም_____

ፊር ማ_____