BAHIR DAR UNIVERSITY

COLLEGE OF MEDICINE AND HEALTH SCIENCE

SCHOOL OF PUBLIC HEALTH

HEALTH EXTENSION PACKAGE COMPLETION AND MOTHERS' HEALTH SEEKING BEHAVIOR FOR COMMON CHILDHOOD ILLNESS, IN WEST GOJJAM: COMPARATIVE SURVEY

By: Yihun Shegnew (BSc.)

A THESIS SUBMITTED TO BAHIR DAR UNIVERSITY COLLEGE OF MEDICINE AND HEALTH SCIENCE SCHOOL OF PUBLIC HEALTH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF GENRAL PUBLIC HEALTH

MAY, 2017

BAHIRDAR, ETHIOPIA

BAHIR DAR UNIVERSITY

COLLEGE OF MEDICINE AND HEALTH SCIENCE

SCHOOL OF PUBLIC HEALTH

HEALTH EXTENSION PACKAGE COMPLETION AND MOTHERS' HEALTH SEEKING BEHAVIOR FOR COMMON CHILDHOOD ILLNESS, IN WEST GOJJAM: COMPARATIVE SURVEY

By: Yihun Shegnew (BSc.)

Advisors: Fentie Ambaw (MA, Associate Professor)

Eleni Admassu (BSc, MPH/RH)

MAY, 2017

BAHIRDAR, ETHIOPIA

©

Declaration

I, the undersigned, declared that this thesis is my original work, hadn't been presented for a degree in any other university and that all sources of materials used for the thesis have been accordingly acknowledged.

Name: - Yihun Shegnew

Signature ----------

Date of submission: - 26/09/2017

We, the undersigned declare that as university advisors this thesis was undertaken with our supervision.

Name: - Fentie Ambaw (MA, Associate professor)

Signature ----------

Date of submission: - 26/09/2017

Name: - Eleni Admassu (BSc, MPH/RH)

Signature ----------

Date of submission ----------

External Examiner

Name: - ----------

Signature ----------

Date of submission: - 26/09/2017

Internal Examiner

Name: - Hordofa Gutema (BSc, MPH/HEHP)

Signature ----------

Date of submission: - 26/09/2017

Acknowledgment

First and for most, I would like to forward my deepest appreciation and thanks to my advisor Fentie Ambaw(MA, Associate professor) and Eleni Admassu(BSc, MPH/RH) for their constructive advice, support, valuable comments and suggestions during the process of this thesis work.

I would also like to thank Bahir Dar University, college of Medicine and health science, school of public health to do the thesis, and also, I would like the thanks the study participants.

Acronym

FMOH	Federal Ministry of Health of Ethiopia
PHC	Primary Health Care
HEW	Health Extension Worker
CHW	Community Health Worker
EDHS	Ethiopian Demographic Health Survey
HEP	Health Extension Program
HSB	Health Seeking Behaviors
HCP	Health Care Provider

Abstract

Background–Mothers' health care seeking behaviors have importance to avoid many deaths attributed to delays and mothers' response for signs and symptoms of childhood illness is very crucial to reduce severity and complications. Mothers from Ethiopia delay in appropriate care from health institutions and not seek any care contributes to the large number of child deaths. To improve the mothers 'health seeking behaviors and coverage of basic health care services health extension package program remains the core to reduce child deaths in rural residences. This study assesses health extension package completion and mothers' health seeking behavior for common childhood illness in South Achefer district of West Gojjam.

Objective - The main objective of this study is to assess health extension package completion and mothers' health seeking behavior for common childhood illness mainly diarrhea, febrile illness and ARI in South Achefer district West Gojjam Ethiopia.

Methods: A comparative community based cross-sectional study was conducted among 239 from graduated and 239 from not-graduated mothers having under-five child with childhood illness in South Achefer District from November 2016 to April 2017. Sample size was calculated by two population proportion formula by using STATA version 12.0, and proportional allocation was used to allocate for each selected rural kebeles. Systematic random sampling technique was used and to select study participants. The health seeking behavior data was collected by well-trained data collectors and interview based structured questionnaire was used. The collected data was entered into Cspro version 6.3 and exported to SPSS version 23.0 for analysis. Odds ratio with 95% CI was computed to assess the strength of the associations.

Results: A total of 478(239 from graduated and 239 from not-graduated) mothers were interviewed among these 41.2% of mothers were sought health care in the south Achefer district. Health seeking behavior for mothers from graduated households 49.4% and mothers from not-graduated households 33.1%. Age of the mothers, educational status, numbers of family members, perceived severity and age of child showed a significant association for health seeking behavior of mothers for common childhood illness in graduated households. Whereas educational status, monthly income, number of under-five child, perceived severity, sex of child and age of child showed a significant association for health care seeking behavior of mothers from not-graduated households.

Conclusion: Mothers from graduated household seek health care more than mothers from not-graduated. Age of the mothers, educational status, number of family members, perceived severity and age of child showed a significant association for health seeking behavior of mothers for common childhood illness in graduated households. Whereas educational status, monthly income, number of under-five child, perceived severity, sex of child and age of child showed a significant association for health care seeking behavior of mothers from not-graduated households. Work on improve family planning service in the community, HEW create awareness in the community to increase the health seeking behavior of mothers regardless of graduation status, concerned bodies should intervene the sustainability of graduated households that don't relapse from the graduation status.

Tables of contents

1. Introduction

1.1. Background

Millions of mothers and their children through the world are living in a social environment that doesn't encourage health care seeking behavior(1). Reduction of childhood mortality is a worldwide health priority and one of the Millennium Developmental Goals (MDG). According to the United Nations Children's Fund 2012 report globally 6.9 million children die before the age of five years annually. The majority of these deaths occurred in Sub-Saharan Africa. Ethiopia is one of the countries with a consistently high under- five mortality rate. It is ranked 36th among Sub- Saharan Africa countries(2).

The federal ministry of health (FMOH) of Ethiopia introduced the health extension package (HEP) since 2002to provide essential services to more communities. The HEP promotes healthy behavior and seeks to provide essential preventive care to underserved communities at the grassroots level. HEP is design to ensure ownership and participation by increasing health awareness, knowledge and skills among community members and promote in accessing health services and improve the utilization of peripheral health services by bridging the gap between communities and health facilities through health extension workers (HEWs) (3).

The HEWs are required to split their time between the health post and the community outreach activities include promoting model families, community groups or households. At the health post the following basic services are provided immunization, health education, antenatal care, family planning, delivery and postnatal care, growth monitoring of children, community treatment of severe acute malnutrition, diagnosis and treatment of malaria, treatment of diarrhea with oral rehydration fluids, treatment of eye infections with eye ointment, treatment of selected skin problems with ointments, Vitamin A supplementation, first aid, referral of difficult cases, documentation and reporting(4).

When the health education is expanded through model families to the communities by the theory of diffusion of innovation of the behavior change theories mothers to seek their own health and utilizes health services available in the community. Though the FMOH has focused on "providing quality promotive, preventive, and selected curative health care services in an accessible and equitable manner to reach all segments of the population, with special attention to mothers and children. The policy places particular emphasis on establishing an effective and responsive health delivery system for those who live in rural areas(5, 6).

Community health workers, has varied roles to play in improving the health of the community like creating awareness about health and its social determinants, mobilizing the community towards local health planning, increased utilization and accountability of the existing health services, promoting good health practices, and providing a minimum package of curative care as appropriate and feasible for that level and make timely referrals(7).

The HEP of Ethiopia has sixteen packages which are useful to reduce the morbidity and mortality in the community especially in rural residences. Among these packages sexually transmitted infections prevention and control, TB prevention and control, malaria prevention and control, first aid emergency measures, family health, maternal and child health, family planning, immunization, nutrition for child, adolescent reproductive, excreta disposal, solid and liquid waste disposal, water supply and safety measures, healthy home environment, personal hygiene, rodent control and health education and communication in the community. When the household completes the above packages the health extension workers give certificate to model households(8).

Hence the Health extension package program don’t cover all of the population rather than prioritizing and identifying those who needs special attentions in the community to improve the health seeking behaviors of mothers. (4).

1.2. Statement of the problem

In 2015, there are 5.9 million under 5 children died, from these more than half of these early child deaths are due to conditions that could be prevented or treated with access to simple, affordable interventions. About 45% of all child deaths had direct relationship to malnutrition. In sub-Saharan Africa from 12 children 1 child died before his or her fifth birthday which is higher than the average ratio of 1 in 147 in developed countries. Children in sub-Saharan Africa are more than 14 times more likely to die before the age of 5 than children in developed regions(9).In the world, half of the under five deaths occurs only in China, Democratic Republic of Congo, India, Nigeria and Pakistan, from these more than a third of all under-five deaths accounted by India 21% and Nigeria 13%(10, 11).

The children from the rural communities often have the highest risk of infections and severe disease but are least likely to seek appropriate care and to receive treatment relative to urban communities (12). A study from developing countries reported that delay in seeking appropriate care from health institutions and not seeking any care contributes to the large number of child deaths (13).

In Ethiopia, under-five child mortality varies by household wealth category and level of mother's education. As the Ethiopian demographic health survey result in 2011, the under-five mortality rates are higher among children from poor families than those from more prosperous families(14). Similarly, children whose mothers completed higher education had the lowest under-five mortality rate 24/1000 live births compared to children whose mothers had no formal education 121/1000 live births. There are significant variations between rural and urban settings with Urban mortality rate (UMR) in urban area estimated at 83/1000 live birth. Children are at greater risk of dying before age five if they are a mother denied basic education and poor households(15).

Although care seeking interventions have the potential to substantially reduce child mortality in developing countries, large number of children die without ever reaching a health facility and due to delays in seeking care. Inability to recognize potentially life-threatening conditions and pluralistic care-seeking practices were factors of caregivers to delays in seeking care. This delay could affect child health and can lead to complications that make the medical care less effective and may be useless. Treatments for common childhood illness like diarrhea, malaria and pneumonia are usually very effective if care is sought in time. However, the challenge is to implement on-going programs which educate caregivers to recognize when to seek care and which facilitate appropriate care seeking behavior(16).

Morbidity and mortality from these diseases can be reduced when care is sought early. Ability of mothers to recognize and seek appropriate care for these common childhood illnesses is instrumental in reducing child deaths in low-and middle-income countries (LMICs) and in reaching the Millennium Development Goal 4 target of reducing child mortality by two thirds. Appropriate medical care seeking can prevent a significant number of child deaths and complications due to ill health. The importance of caregivers" ability to recognize and seek appropriate care for their children is also one of the recommended key activities in the WHO's and UNICEF's Global Action Plan for the Control of Pneumonia and diarrhea(17, 18).

Ethiopia is among the six countries that account for 50% of children under-five mortality globally, with 194,000 deaths every year (19). More than one third of the deaths are largely due to communicable diseases that could be easily prevented and treated using affordable and low-technology interventions(20), even though there are great achievements in decreasing infant and child mortality from year 2000 to 2011, still large proportions of Ethiopian children are suffering from diarrheal diseases, respiratory problems and malnutrition(14). In response to the country's health problem the government introduced HEP. HEP was designed based on the concepts and principles of Primary Health Care, to improve the health status of families, with their full participations, using local technologies and the community's skills and wisdom(3).

Generally, there is a growing amount of literature on HSB and the predictors of health services utilization, especially in developing countries but as far as the investigator's information there is no study conducted to identify the health extension package completion that compare mother's/ care givers health seeking behavior in this study area. There for the purpose of this study is to assess the health extension package completion and mother's/ care givers health seeking behaviors for common childhood illness and identifying associated factors in order to improve child survival.

1.3. Literature review

Maternal Characteristics and health seeking behavior

The Behavior is the internal coordinated responses of individuals and groups to external and internal stimulus that it is changeable. Health or 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. For this reason, the nature of care seeking is not homogenous depending on cognitive and non-cognitive factors that call for a contextual analysis of care seeking behavior(21).

The most common health care-seeking behavior visit to the clinic 79% of the mothers took their children to the clinic for coughing, 68% for fever, 50% for diarrhea and 11% for worms. The second most common form of health care-seeking behavior was self-care for diarrhea (20%) and for fever 13%; a private doctor was consulted for coughing (11%) and drug vendors were used for the treatment of worms 8%. Most mothers 76% used home remedies for the treatment of diarrhea and modern drugs for the treatment of fever 91%, for coughing 98%, and for worms 22%. Among mothers in the age group 31 to 49 years, 52.9% had experienced the death of a child, followed by 13.3% in the age group 15to 19 years, and 9.8% in the age group 20 to 30 years(22).

In Ghana, more Christians seek treatment for their children from prayer camps than Muslims. It is worth noting however, that a higher proportion of Muslims use prayer camps than Catholics (37.5% versus30%). Similarly, far more Traditionalists 50% seek treatment from prayer camps than Catholics and Protestants. All the caregivers between 15-19 years seek treatment from prayer camps for their children's condition and more than half of those between 30-34 years and 40-44 years also visit the prayer camps 65.0% and 54.6% respectively(23).

A study done in Dhaka city Most 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 main reasons for not seeking treatment were waited for self-recovery 67.5%, did not have enough money 52.5%, nobody told them to receive treatment 12.5%, 4% respondents said that the health care facility was too far to receive treatment and 7.5% respondents did not feel that treatment was necessary. In this study health seeking behaviors of mothers and education had direct relationship and also health seeking behaviors of mothers and family monthly income had direct relationship(24).

A study done in Yemen shows among 212 sick children 51.42% sought medical care, while 9.91% caretakers did nothing in response to illnesses when their children had faced a common childhood illness. The mean duration before seeking medical care was 3 days and decision was made by both parents for 35.38% children and 29.25% of the respondents stated that the decision was taken by the mother alone. Out of the total number of medically treated children in this study, care was sought on the first day of perceived onset of illness for only 17.43%. Although sought medical care was the most common pattern of HSB, it was the first action for only 26.42% of respondents(16).

A systematic review on the recognition of care seeking behavior for Childhood Illness in Developing Countries showed that the median of 73.0% caregivers sought care from a healthcare provider when their child was suffering from diarrhea, malaria or pneumonia and a median of 44.9% sought care from appropriate providers. Care seeking was highest for pneumonia with a median of 91.3% of caregivers seeking care from any provider, and lowest for diarrhea with 68.5%. Seeking no care was commonest for diarrhea 21.3% and least common for malaria 8.1%. Appropriate care was sought most frequently for pneumonia 84.0%, and least frequently for malaria 42.5%. Care seeking from CHWs was low 5.4% for diarrhea, 4.2% for pneumonia, and 1.3% for malaria. Caregivers sought care from pharmacies and drug vendors most frequently in cases of malaria 30.8%, and least frequently for pneumonia 15.2%. Traditional healers were consulted most frequently for pneumonia 21.4%. ORT was used by caregivers in 34% of cases of diarrhea(25).

Among enabling factors, as compared to poorer household, wealthier households were 2.5 times more likely to choose private HCPs for any illness. Children in rural areas were likely to be taken to any type of HCP for diarrhea but rural children were less likely to utilize private HCP for fever/cough. Children having severe symptoms were 2–3 times more likely to be taken to any type of HCP(26).

A study in Pakistan shows that 24% of mothers were aware of the dangers of a child getting more sick while 27% and 12.8% of them were aware having fever and fast breathing or is not able to breast feed respectively. Only 5% waited at home for the illness to subside on its own. Although 90.1% of them sought 'appropriate" care for childhood illness, 69.4% of them were sought care from private doctors instead of government medical practitioners(25).

A study conducted in Ethiopia on Integrated Community Case Management of Childhood Illnesses Reported care-seeking sources by mothers of a child sick with diarrhea, fever, and/or

Pneumonia in the 2 weeks preceding the survey mothers in the study, (31.0%) reported seeking care from an appropriate source a source where evidence-based child health treatments could, in theory, be obtained. Among appropriate sources, 9.3% sought care from HEWs at the health post, 16.0% from a higher-level public source, and 7.3% from a private source (27).

A study done in Oromia region derra district mothers were involved of those under five children who had diarrhea, fever, ARI and other illnesses two weeks preceding the survey, higher proportion of those from urban community were taken to health facilities or providers than rural. 19(86.4%) of urban children who had diarrhea and 75% who had fever were taken to health facilities or providers compared to rural children where only 45.5% with diarrhea, 34.8% with ARI and 34.4% with fever were taken for treatment to health facilities or health care provider. when we see care seeking preference by the type of illnesses, the same proportion of urban mothers sought care for diarrhea and ARI compared to rural mothers who sought care more frequently for diarrhea than ARI and fever(28).

A study done in Rural Ensaro district Amhara region from 641 respondents seeking healthcare for childhood illness more likely higher when the mothers' age is 20-24 years and 25-29 years than age of the mothers' /care givers more than 35 years respectively. Regarding to mothers or caregiver's educational status, those who were able to read and write, primary education, secondary education, certificate and diploma and above were more likely to seek health care than those who were illiterate. According to the occupation of the mother governmental health worker were more likely seek health care than house wife. Household who had 2-5 family size were more likely seek health care than household who had more than 5 families size and also household lived in urban more likely seek health care than rural residence. Caregivers who were earn more than 1000 birr per month more likely seek health care compared to who earn less than 300 birr per month(29).

Child characteristics and health seeking behavior

Worldwide the most common cause of under five children deaths are pneumonia 18%, diarrhea 11%, preterm birth complications 14% and malaria 7%. Among these causes nearly 90% of child deaths due to pneumonia and diarrhea occur in sub-Saharan Africa and South Asia whereas in Ethiopia, the leading causes of mortality in children under 5 years old are diarrhea 66%, pneumonia 15% and ear infection 12% were the most common illnesses(30, 31).

From childhood illness Pneumonia and diarrhea are diseases of the poor and their distribution is highly concentrated, with three quarters of global pneumonia and diarrhea deaths occurring in just 15 countries of the world (32).

In rural Bihar, India over half of caregivers reported that they would not take children under 6 months of age to the field where they worked out of fear of exposing them to the evil eye; as such, they were left at home meaning that for the duration of the work day, the child was not breastfed, in turn predisposing them to becoming weak. Fewer efforts were made to protect female children against evil eye compared with males; indeed, females appeared to be disadvantaged in a number of other ways, with lower level of importance during mealtime food distribution and the threshold for seeking health care and treatment for sever acute malnutrition for female children appeared to be higher than that for male children(33).

Of the six highest burden under five mortality countries having a Demographic and Health Survey in 2010 or later (with data publicly available for analysis) and including the standard indicator on suspected pneumonia and care seeking Burkina Faso, Democratic Republic of Congo, Ethiopia, Nigeria, Tanzania and Uganda together account 53% of deaths of childhood pneumonia mortality among children under-five in sub-Saharan Africa, and 26% of global childhood pneumonia mortality(32).

Another study in Kenya showed that higher percentages of appropriate health seeking were seen among the lower ages, with the younger children having a higher percentage of appropriate health seeking than that of the children of older ages i.e. those between 0-11months 49.9%, 12-24 months 44.8%, 25-36 months 37.1% and 37-48months 37.8%(34).

In Zambia, the most common childhood illness and the most leading cause of morbidity and mortality in children less than five years of age were diarrhea, pneumonia and malaria. Diarrhea 37.7%, fever 31.1% and cough 48.1% were the commonest symptoms reported in this study area but when come in to Ethiopia acute respiratory infection (ARI), fever, and dehydration from diarrhea are important contributing causes of childhood morbidity and

mortality. According to EDHS 2011, 7% of children under age five showed symptoms of ARI, 17 % exhibited fever, and 13% experienced diarrhea in the two-week preceding the survey. Treatment from a health facility or provider was sought for 27% of the children with ARI symptoms, 24% of the children with fever symptoms and 31% of children with diarrhea and the study conducted in Addis Ababa Ethiopia majority of the children affected by acute diarrhea were 24-59 months and 0-11 months which was36.9% and 35.1% respectively (14, 35, 36).

Symptoms and Sings of childhood illness and Health Seeking Behavior

A study conducted in India the prevalence of common childhood diseases is 9.13% ,14.8% and 17.67% of their children had diarrhea, fever and cough respectively. Nearly one-third of the children with diarrhea and fever/cough did not receive any treatment. The proportion of children, who didn't receive any type of medical treatment during an episode of diarrhea and fever/cough, was 36.9% and 28.9% respectively. Two-thirds of children who received treatment were from private health care providers. Among predisposing factors, children aged 1–2 years and those born at health facility were more likely to be taken to any type of HCP during illness(26).

In western Nepal children who attended the immunization clinics 17.7% children had one or more symptoms during the preceding 15 days. The mean age of the children was 6.3 months. The mean number of symptoms reported was 1.7 and the most common symptoms reported were fever among 36.7% children, cough among 28.3% children, running nose among 14.6%) children and diarrhea among 14.2% children(37).

A study done in Nigeria care seeking behavior for childhood diarrhea care was given at home 50.4%, at the health center 27% and at the local drug store 19.1%. Main reasons for care sought were health education 31.9%, treatment cost 18% and experiences 16.6%. Residence of the caregivers has valuable differences in care seeking for childhood diarrhea. The major symptoms that prompt immediate treatment among respondents were vomiting75%, frequent stooling 71%, fever 68%, while fast breathing came forth with a little above 51% of respondents. Major reasons by respondents for not seeking treatment for children were child's condition not being serious 50% and cost of treatment 41% (38, 39).

A study conducted in Tanzania 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 while this proportion was only 23.0 % for children with diarrhea. About60.1% of children with diarrhea were treated at first at home while this proportion was only 5.7% for children with fever and 3.1

% for children with ARI. Nearly 45% of all children with ARI and 41% of children with diarrhea were treated in a public facility(40).

A study done in Rural Zambia Impact of Integrated Community Case Management on Health-Seeking Behavior between the integrated community case management community and non-integrated community case management communities mothers in both groups used CHWs as the first source of care for cough about one-half the time, with the health facility serving as the next most common source of care(41).

Factors affecting health seeking behaviors

Andersen and Newman framework of health services utilization to develop a behavioral model that provides measures of access to medical care explains an individual's access to and use of health services are considered to be a function of three characteristics: This are, Predisposing Factors like socio-cultural characteristics of individuals that exist prior to their illness, education, occupation, age and gender. Enabling Factors like logistical aspects of obtaining care, means and know how to access health services, income, travel available health personnel and facilities, and waiting time. Need factors like most immediate cause of health service use, from functional and health problems that generate the need for health care services(42).

A systemic review done in developing countries shows that geography factors (urban care givers are more likely to seek medical care than rural), severity of illness (mothers more likely to seek medical care when disease conditions more sever), socioeconomic status and cost of health care, and gender were main factors influencing care seeking for childhood illness. Gender (studies in Kenya, Ethiopia, Pakistan and Sri Lanka found no significant difference in care seeking rates between male and female children whereas studies carried out in Indonesia and Burkina Faso, however, found that cares were more likely to seek care for boys than girls whereas in India, Factors like mass media exposure of mothers, literacy status of mothers, below poverty line card holder mothers, and those residing in joint family structures(43, 44).

According to a research done in Yemen, main reasons of mother's/care givers for not seeking medical care were illness was mild 39% and illness is not for medical treatment 31%. Thought the illness was mild/will resolve by itself was main reason for delaying seeking medical care for more than 3 days 66.32%. This study shows that caretakers with secondary school education were six times more likely to seek medical care than non-educated ones. Perceiving illnesses as severe was five times more likely to be associated with medical care seeking as compared to not severe(16).

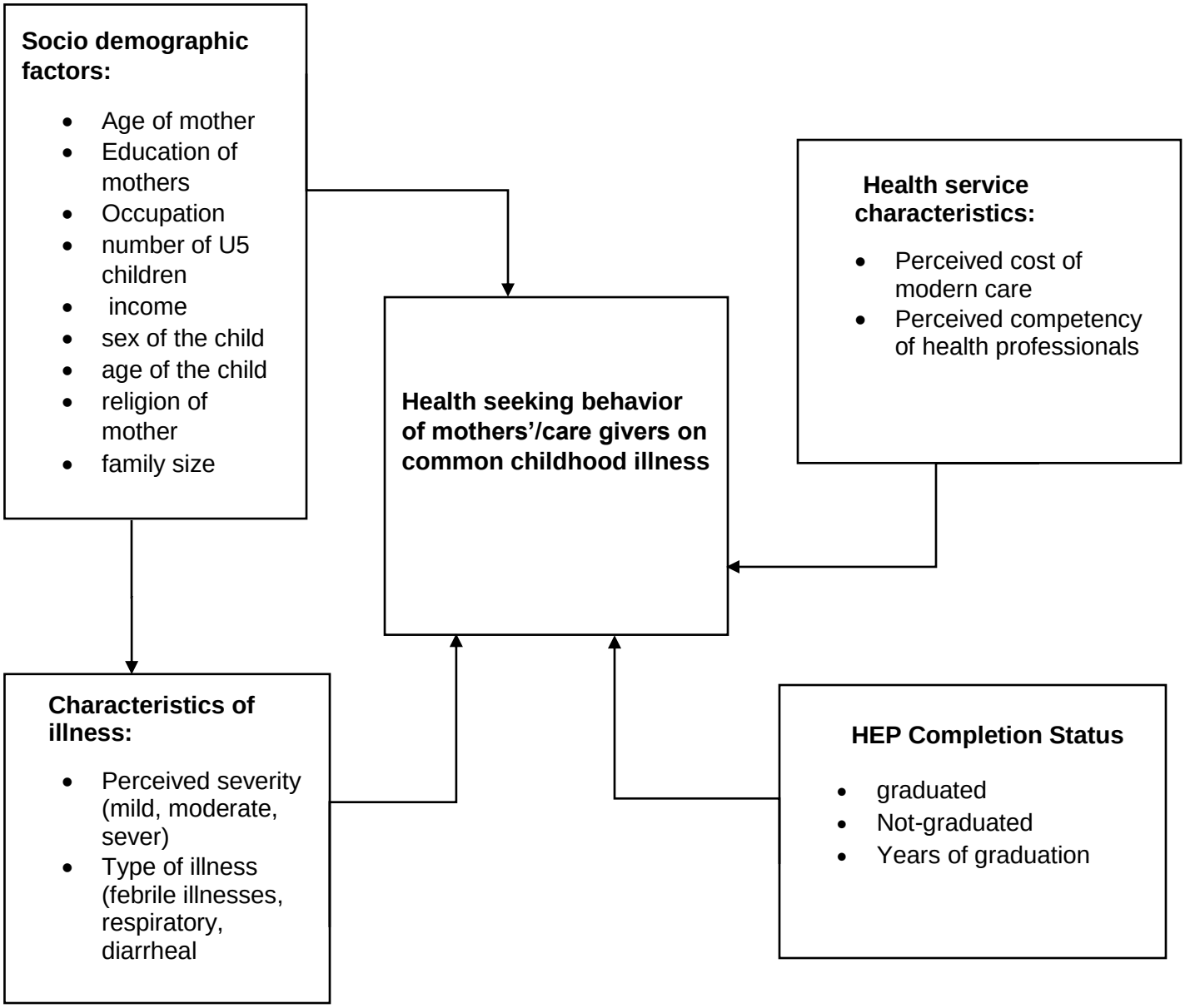
Rural and urban populations have differences in socio- demographic, socio-economic, cultural compositions and the health extension programs graduation which have an effect on their health care seeking behavior. In sub Saharan Africa, child mortality is higher among rural, poor and less educated families (45, 46). Early health care seeking behavior of mothers has a potential to reduce child mortality particularly in developing countries like Ethiopia (47).

However, different studies showed that mothers health care seeking behavior for common childhood illness are influenced by socio-demographic and cultural, educational factors. Studies also indicated that timely decision to seek remedies, and times of health seeking after the onset of illness are influenced by residence (28, 48). Children from rural communities often have the highest risk of infection and severe disease especially for diarrhea, fever and acute respiratory illness (ARI), mothers are less likely to seek appropriate health care for them as compared to urban mothers(49).

A study done in Derra district, Ethiopia care was sought from health facilities only for less than half of sick rural children 43.2%as compared to urban 87.2%. Mothers' responses and actions were frequently influenced by their perception of severity or worsening of illness. Lack of money 36%, distances 27.7% and perception of the illness not being serious 25.3% were the major reasons for not seeking care (28).

1.4. Conceptual framework

This conceptual frame work is adapting from Yemen and the variable that affects the outcome variable are broadly classified as socio-demographic characteristics, characteristics of illness, health service characteristics and the HEP completion Status of the households(16).



1.5. Justification of the study

Over two-thirds of childhood deaths in Ethiopia are caused by few and easily preventable conditions; diarrhea, cough and ARI.This might due to delay of mothers' health seeking behavior even though there is an access of health facility.

Improving households' health seeking behavior contributed significantly to reduce the child death. The health extension package introduced in Ethiopia since 2002 focused mainly in rural areas. The program implementation is that if the right knowledge and skill is transferred to households, they can take responsibility for producing and maintaining their own health. Therefore, as the investigator's information there has been no research done on health extension package completion and mothers' health seeking behavior for common childhood illness in the study area yet. Hence this study tries to compare significant effect on childhood illness as well as theoretical significance.

1.6. Significance of the study

Worldwide the most common causes of death in children less than five years are diarrhea, cough and ARI which is similar to in Ethiopia and it is easily prevented by avoiding delay, strengthened at community level by the help of Health extension workers, behavioral change communication strategies to improve mothers' health care seeking behaviors. As far as my information there is no research conducted to assess health extension package completion and mothers'/care givers' health seeking behavior for common childhood illness in different regions of Ethiopia. Therefore, this study helps on different areas as follows.

- The study enables to understand health extension package program and mothers' health seeking behavior for health extension workers and policy makers.
- Identifying associated factors that influences care seeking behavior between health extension package graduated households and not-graduated households is important to government officials to create awareness to the community through mass media and create the policies that improve the program to enhance good health seeking behavior in order to promote child health.
- Moreover, the information for the present study used as a base line for other researches who wants conduct on the helpful of health extension package and used to improve the guideline.

2. Objective

2.1. General objective

- To assess health extension package completion and mothers'/care givers health seeking behavior for common childhood illness in South Achefer district, west Gojjam Ethiopia, 2017.

2.2. Specific objectives

- To compare the health seeking behaviors of mothers for under-five children illnesses between graduated households and not-graduated households in south Achefer district.
- To identify associated factors affecting health seeking behaviors of mothers' having under-five child illness in south Achefer district between the graduated and not-graduated.

3. Methods and materials

3.1. Study area and period

The study area was in South Achefer District and the study period was conducted in February 2017, West Gojjam, Amhara Regional State, Ethiopia which is located 505 km north west of Addis Ababa. Most of the climatic condition of the District is woynadega. The District has 18 rural kebeles and 2 urban kebeles. According to the Amhara Regional State Bureau of Finance and Economic Development, the total population of the District is about 158,206 and there were 21,421 under five children. The district has one primary hospital and 8 governmental health centers.

3.2. Study design

A community based comparative cross-sectional study design was employed to assess health extension package completion and mothers'/caregivers' health seeking behaviors for common childhood illness.

3.3. Source population

The source population for the study was all mothers' /caregivers who had under-five children in South Achefer district of rural kebeles and similar settings.

3.4. Study population

The study population was mothers who had under-five children present in their home during data collection period with history of common childhood illness in South Achefer district, February 2017.

3.5. Inclusion and exclusion criteria

- Inclusion criteria: -

  Mothers/ care givers who had under-five children with history of common childhood illness within two weeks of data collection period.

- Exclusion criteria: -

  A mother can't communicate in any means during the interview.

3.6. Sample size determinations

Sample size was computed by using equal sample size for two population proportion formulas with following assumptions;

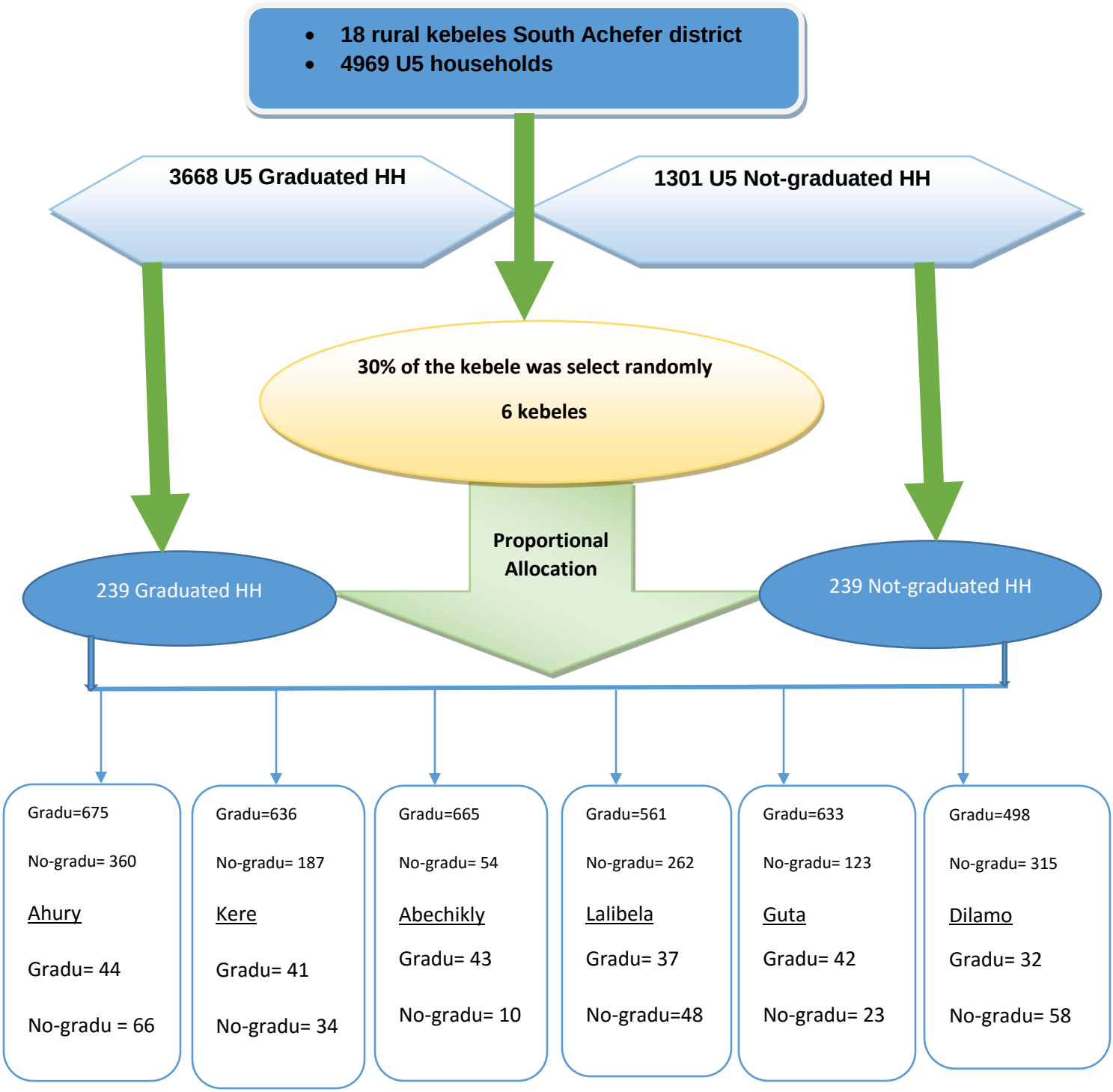
- Total population of the District = 158,206
- Total under five years of age children expected by conversion factor of 13.5%(50) = 21,421
- P1= percentage of rural mothers who seek care from health institution 22.4% for fever (EDHS 2011) and was taken as not-graduated.
- P2**=** percentage of mothers who seek care from health institution 37.4% of graduated mothers for fever.
- Significance level = 0.05
- Power of test =0.80

To detect a minimum *15%* difference in care seeking practices between graduated and not-graduated and the other assumptions. The sample size has been calculated by using STATA version 12.0. n = 159 and multiplied by 1.5 which was 239 since the stage is two in order to get the study subject the final sample size = 478(1:1 ratio of graduated and not-graduated i.e. 239:239).

3.7. Sampling techniques and sampling procedure

From the total 18 rural kebeles in the district 6 kebeles was selected randomly. A total of 478 household would be selected in 6 rural kebeles 239 from graduated households and 239 not-graduated households. I was take numbers of household from kebele health extension workers list and make sampling frame from it. A total of 478 households were distributed by probability proportion to size in each selected rural kebeles. Census was conducted to trace eligible mothers in the selected kebeles for two days. Following the census, to go through the respondents systematic sampling techniques was applied. If there were more than one sick under-five children in the selected household lottery method was used to get detailed information .The following figure showed details of the sampling procedures.

Schematic representation of the sampling procedure, south Achefer district, West Gojjam zone, April 2017



Gradu => graduated households No-gradu=> not-graduated households

3.8. Data collection tools and procedures

Interviewer administered structured questionnaire was used to collect the data. The questionnaire had three parts: part I, socio-demographic characteristics of mothers'/care givers, part II, health seeking behavior of mothers'/care givers and part III factors affecting of mothers'/care givers health seeking behavior. Questionnaire adapted from previous researches done in Yemen this questionnaire has modified according to Ethiopia context(16). English version of the questionnaire will translate in to Amharic language for better understanding by the data collectors and respondents.

Consistency was checked by translating the Amharic version of the questionnaire. Data was collected using face to face interview after receiving verbal consent from the respondents.

3.9. Data collectors

Data collectors were five Diploma nurses and supervisors were two BSc Nurses who had experiences in the previous EDHS survey. Training was given for data collectors and supervisor for two days on method of extracting the need of information through interviewing, how to fill the information on a structured questionnaire and the ethical aspect in approaching the care givers which will in a polite and respectful manner. The supervisors would monitor and control the data collection process of the interviewers and tried to solve problems by themselves and by informing to the principal investigator.

3.10. Data quality control

In order to achieve a good data quality, data collectors were selected based on profession and previous experience of data collection. Pre-testing was conducted on 5% of sample size prior to the actual data collection process in the study district. The template scheme for data entry was developed and pre-tested for ranges, skipping patterns and allowed legal values by entering about 10 questionnaires. Closer supervision was undertaken during data collection. Problems on data collection or doubt would be discussed over night with data collectors and supervisors.

3.11. Variables

3.11.1. Dependent variable

- Mothers' health seeking behaviors.

3.11.2. Independent variables

- Socio demographic characteristics of mothers/: Age, marital status, education, occupation, religion and income.
- Socio demographic characteristics of children: age of child, sex of child and number of children's.
- Characteristics of illness: - Type of illness (febrile illnesses, respiratory, diarrheal)
- Health service characteristics: - Perceived cost of modern care, perceived competency of health professionals.
- HEP graduation Status: - graduated from HEP, not-graduated from HEP, duration of graduation from HEP.

3.12. Operational definitions

- **Health care seeking behavior:** visiting health facility when a mother sees fever, diarrhea, or cough in her under five children.
- **Health extension package completion**: the household which completed the 16 health extension packages.
- **Common childhood illness:** Disease with three childhood illnesses (acute respiratory infection, fever, or diarrhea).
- **Diarrhea:** determined as perceived by mother or caretaker, or three or more loose or watery stools per day, or blood in stool was reported.
- **Fever:** perceived by mother as fever or hot body for any child two weeks preceding the survey.
- **Acute respiratory infection**: all cases that had cough accompanied by short or rapid breathing in the two weeks preceding the survey as perceived by mothers.

3.13. Data processing and analysis

After data collection, each questionnaire was checked visually for completeness and coding was given at the right margin of the questionnaire followed by almost all variables in the questionnaire. After this validation, data was stored using Cspro version 6.3 and then the data was exported to SPSS version 23.0 statistical software packages for data cleaning and analysis.

For each type of illnesses frequencies, percentage was used to describe the study population in relation to relevant variables. Crude and adjusted odds ratio with 95% CI was calculated to determine the strength of association between response variable and predictor variables. P value less than 0.05 was considered as a level of significance. Crude odds ratio (COR) with 95% confidence interval (CI) was calculated using bivariate logistic regression analysis. Variables having p-value less than or equal to 0.2 was fitted to multiple logistic regression so as to assess the presence and strength of association. Consecutively multi-variable logistic regression analysis had performed to control the potential confounding variables under the study to identify the independent determinant factors at 5% level of significance.

3.14. Ethical considerations

Ethical approval was obtained from the school of public health, Bahir Dar University. A formal letter was written to South Achefer district health bureau for permission and support. The district health bureau wrote a letter to all concerned bodies. At each level the aim of the study was explained for community leaders and heads of the households. Respondents would be assured about the confidentiality of the information they provided as well as their right to withdraw at any time during data collection.

3.15. Dissemination of result

The result of this study submitted to school of public health, college of medicine and health science, Bahir Dar University. The study result will be submitted to south Achefer district health bureau, west Gojjam health bureau and Amhara Region health bureau. Effort will be made to present the result in locally or internationally held conferences and meetings. For the publication purpose, the abstract of this thesis will be submitted to national or international peer reviewed medical journals

4. Results and Discussions

4.1. Socio demographic characteristics

A total of 478 mothers were interviewed, 239 from graduated and 239 from Not-graduated households.

In this study, 478 mothers/caregivers were interviewed and majority of study participants (474(99.2%)) were biological mothers and the rest were grandmothers. The mean age was found to be (30.63 (±6.5)) years. Majority of mothers/care-givers age group fall within greater than 30 years.

Majority of the mothers (424(88.7%)) were farmers followed by merchant (48(10%)) in occupation, all respondents from Amhara ethnic groups and Orthodox Christians. Three hundred thirty-nine (70.9%) had informal education, (146(61.1%)) from graduated and (193(80.7%)) from not-graduated mothers.

According to family members in the household 2-5 members in the household (169(70.7%)) and (180(75.3%)) were from graduated and not-graduated respectively.

With regard to the socio demographic characteristics of the youngest under five years of children, 290(60.7%) were female and 245(51.2%) were in the age group 0-23 months in both groups. Socio-demographic characteristics of study subjects were summarized in Table-1.

Table-1 Socio-demographic characteristics versus healthcare seeking behavior among graduated and not-graduated households, in south Achefer district, West Gojjam zone, April 2017

Characteristics	Graduation Status No (%) (n=478)			
	Graduated health seeking behavior		Not-Graduated health seeking behavior	
	Yes	No	Yes	No
Care giver				
Mothers	117(49)	120(50)	79(33.1)	158(66.1)
Grand mothers	1(0.4)	1(0.4)	0	2(0.8)
Age of mothers				
Less than 30 years	47(19.7)	76(31.8)	30(12.6)	77(32.2)
Greater than 31 years	71(29.7)	45(18.8)	49(20.5)	83(34.7)
Ethnicity				
Amhara	118(49.4)	121(50.6)	79(33.1)	160(66.9)
Marital status				
Single	2(0.8)	1(0.4)	0	0
Married	112(46.9)	116(48.5)	78(32.8)	150(62.8)
Divorced	4(1.7)	4(1.7)	0	7(2.9)
Widowed	0	0	1(0.4)	3(1.3)
Religion				
Orthodox	118(49.4)	121(50.6)	79(33.1)	160(66.9)
Educational status				
Not formal	65(27.2)	81(33.9)	56(23.4)	137(57.3)
Formal	53(22.2)	40(16.7)	23(9.6)	23(9.6)
Occupation				
Farmer	110(46)	105(43.6)	68(28.5)	141(59)
Merchant	5(2.1)	14(5.9)	10(4.2)	19(7.9)
Government employee	3(1.3)	2(0.8)	1(0.4)	0
Monthly income				
<1347 ETB	50(20.9)	50(20.9)	38(15.9)	101(42.3)
>= 1347 ETB	68(28.4)	71(29.8)	41(17.1)	59(24.7)
Household size				
2-5 members	92(38.5)	77(32.2)	67(28)	113(47.3)
6 and above members	26(10.9)	44(18.4)	12(5)	47(19.7)
Under five children				
One child	93(38.9)	72(30.1)	66(27.6)	111(46.4)
More than one	25(10.5)	49(20.5)	13(5.4)	49(20.5)
Child age				
0-23 months	74(31)	52(21.7)	48(20)	71(29.7)
24-59 months	44(18.4)	69(28.9)	31(13)	89(37.3)
Sex				
Male	48(20.1)	63(26.4)	35(14.6)	42(17.6)
Female	70(29.3)	58(24.3)	44(18.4)	118(49.4)

4.2. Childhood illnesses in graduated and non-graduated household

Two weeks preceding the survey the proportion of common childhood illness among graduated households were ARI (102(42.7%)) followed by febrile illness (78(32.6%)). From the not-graduated households, febrile illness was high among the reported illness with (94(39.3%)).

Table 2: - proportion of common childhood illness among graduated and not-graduated households, in south Achefer district, West Gojjam zone, April 2017

Childhood illness	Graduated Households		Non-graduated Households	
	Number (%)	95%CI	Number (%)	95%CI
Diarrhea	59(27.7%)	19.2,30.1	69(28.9%),	23.4,34.3
Febrile illnesses	78(32.6%)	26.8,38.9	94(39.3%)	33.5,46
ARI	102(42.7%)	36.8,49.0	76(31.8%)	25.5,38.1

4.3. Health care seeking behaviors

Governmental or private health facility was the most common place where mothers sought health care in which both about 118(49.4%) graduated and 79(33.0%) not-graduated sought care from them. Mothers from graduated households seek health their under-five child when got common childhood illness in home treatment 118(49.6%) and mother seek home treatment 155(65.3%) of the counterpart.

The overall two-week preceding the survey, proportion of common childhood illness mostly complained by mothers/care-givers were ARI (102(42.7%)), febrile illness (78(32.6%)) and diarrhea (59(27.7%)) from graduated mothers and ARI 76(31.8%), febrile illness 94(39.3%) and diarrhea 69(28.9%) from not-graduated, from graduated households the health seeking behavior was 118(49.4%) and those not-graduated 79(33.1%) and the overall healthcare seeking behavior of common childhood illness was 197(41.2%). Among mothers, 174(88.3%) of mothers made decision for seeking medical care when their children had got illness while only 23(11.7%) of decision were made by fathers.

Of the total medically treated episodes of illnesses, care was sought on the same day of illness were 82(69.5%) for the graduated households and 36(45.5%) for the counterpart.

The rest, 36(30.5%) and 43(54.5%) of episodes of illnesses graduated and not-graduated, care seeking was started after one days of illness of perceived onset of illnesses respectively.

Regarding to perception of illness, 132(55.2%) from graduated and 128(53.6%) not-graduated were perceived their childhood illness was not sever, 107(44.8%) and 111(46.4%) were perceived their childhood illness was sever.

Table 3: - Health care seeking behavior of mother for common childhood illnesses among graduated and not-graduated households, in south Achefer district, West Gojjam zone, April 2017

Characteristics	**Households Graduation status (n=478)**	
	Graduated households (Number %)	**Not-graduated households (Number %)**
Reported illness		
Diarrhea	59(27.7%)	69(28.9%)
Fever	78(32.6%)	94(39.3%)
ARI	102(42.7)	76(31.8%)
Health seeking behavior		
Home	118(49.4%)	155(65.3%)
Traditional Healer	3(1.3%)	5(2.1%)
Health Facility	93(38.9%)	56(23.4%)
Health facility and Home	25(10.4%)	23(9.2%)
Time of Health seeking after onset of illness		
On the same day of illness	82(69.5%)	36(45.5%)
After one days of illness	36(30.5%)	43(54.5%)
Reasons for not seeking health care		
Not sever enough	33(27.3%)	42(26.3%)
Didn't trust treatment	25(20.7%)	32(20.0%)
Unavailability of trained personnel	22(18.2%)	29(18.1%)
Not enough money	17(14.0%)	24(15.0%)
Too far away	9(7.4%)	11(6.9%)
Couldn't get transport	11(9.1%)	15(9.4%)
Prolonged waiting time	4(3.3%)	7(4.4%)
Perceived Severity		
mild	132(55.2%)	128(53.6%)
Sever	107(44.8%)	111(46.4%)

4.4. Mothers' HSB for common childhood illnesses and the HHs' graduation status

In this study, the health seeking behavior for diarrhea was highly significant among graduation status. Mothers those from graduated households had 3.54 times more likely to seek medical care than mothers from not-graduated households [AOR=3.54(1.5, 8.32)]. Mothers who had family size of 2-5 members in the household were 2.5 times more likely to seek health care for diarrhea than those having greater than or equal 6 family members in the household [AOR=2.58(1.07, 6.21)].

Table 4: - Health seeking behavior for diarrhea, graduation status and demographic characteristics in south Achefer west Gojjam, Ethiopia 2017

Variables	Health seeking behavior for diarrhea			
	Yes	No	COR (95% CI)	AOR (95% CI)
Graduation status				
Not-graduated	27	42	1	1
Graduated	44	15	4.56(2.14, 9.75)*	3.54(1.5, 8.32)**
Age of mothers				
≤ 30 years	24	20	1	1
≥ 31 years	47	37	1.06(0.51, 2.2)	1.76(0.73, 4.21)
Educational status				
Not-formal	51	44	1	1
Formal	20	13	1.33(0.59, 2.97)	1.39(0.53, 3.65)
Monthly income				
< 1347 birr	45	33	1	1
>= 1347 birr	26	24	0.79(0.389, 1.622)	0.68(0.28, 1.64)
Number of under-5 children				
1 child	63	40	3.34(1.32, 8.47) *	2.04(0.67, 6.28)
2 or more	8	17	1	1
Household size				
2-5 members	53	24	4.05(1.9, 8.57) *	2.58(1.07, 6.21)**
>= 6 members	18	33	1	1
Sex of child				
Female	32	36	1	1
Male	39	21	2.09(1.02, 4.26) *	2.18(0.98, 4.89)
Age of child				
24-59 months	28	29	1	1
0-23 months	30	28	1.59(0.79, 3.22)	1.68(0.74, 3.82)

*Note: - * statistically significant on bi-variant logistic regression analysis at 0.2.*

*: - **statistically significant on multi-variable logistic regression analysis at 0.05.*

For febrile illness graduation status wasn't significant to seek health care in the study area. Mothers who had monthly income greater than or equal to 1347 birr 2.59 times more likely to seek health care for febrile illness than those having monthly income less than 1347 birr [AOR=2.59(1.19, 5.65)]. Mothers' age for those greater than 30 years of age were 2.76 times more likely to seek health care for febrile illness than those having less than 30 years [AOR=2.76(1.33, 2.72)].

Table 5: - Health seeking behavior for febrile illness, graduation status and demographic characteristics in south Achefer west Gojjam, Ethiopia 2017

Variables	Health seeking behavior for febrile illness			
	Yes	No	COR (95% CI)	AOR(95% CI)
Graduation status				
Not-graduated	26	68	1	1
Graduated	30	48	1.92(0.86, 3.11)	1.39(0.68, 2.82)
Age of mothers				
<= 30 years	22	72	1	1
>= 31 years	34	44	2.53(1.31, 4.87)*	2.76(1.33, 2.72)**
Educational status				
Not-formal	41	99	1	1
Formal	15	17	2.13(0.97, 4.67)	1.89(0.76, 4.69)
Monthly income				
< 1347 birr	32	93	1	1
>= 1347 birr	24	23	3.03(1.51, 6.1)*	2.59(1.19, 5.65)**
Number of under-5 children				
1 child	46	92	1.2(0.53, 2.72)	1.59(0.65, 3.9) **
2 or more	10	24	1	1
Household size				
2-5 members	21	38	1.23(0.63, 2.4)	1.34(0.64, 2.82)
>= 6 members	35	78	1	1
Sex of child				
Female	27	69	1	1
Male	29	47	1.58(0.83, 3.0)	1.87(0.9, 3.86)
Age of child				
24-59 months	25	60	1	1
0-23 months	31	56	1.33(0.7, 2.52)	1.36(0.67, 2.74)

*Note: - * statistically significant on bi-variant logistic regression analysis at 0.2.*

*: - ** statistically significant on multi-variable logistic regression analysis at 0.05.*

Mothers age for those greater than 30 years of age were 3.13 times more likely to seek health care for ARI than those having less than 30 years [AOR=3.13(1.46, 6.67)] and mothers who had formal educational status were 4.1 times more likely to seek medical care for ARI compared to those having not-formal educational status [AOR=4.1(1.8, 9.33)]. A mother with one child is 2.76 times more likely to seek medical care for ARI [AOR=2.76(1.23, 6.2)].

Table 6: - Health seeking behavior for ARI, graduation status and demographic characteristics in south Achefer west Gojjam, Ethiopia 2017

Variables	Health seeking behavior for ARI			
	Yes	No	COR (95% CI)	AOR(95% CI)
Graduation status				
Not-graduated	26	50	1	1
Graduated	44	58	1.46(0.79, 2.67)	0.98(0.39, 2.49)
Age of mothers				
<= 30 years	28	61	1	1
>= 31 years	42	47	1.95(1.1, 3.5)*	3.13(1.46, 6.67)**
Educational status				
Not-formal	29	75	1	1
Formal	41	33	3.21(1.72,6.02)*	4.1(1.8, 9.33)**
Monthly income				
< 1347 birr	11	25	1	
>= 1347 birr	59	83	1.62(0.74, 3.54)	2.14(0.77, 5.95)
Number of under-5 children				
2 or more	25	57	1	1
1 child	45	51	2.01(1.08, 3.73)*	2.76(1.23, 6.2)**
Household size				
2-5 members	23	28	1.4(0.26, 0.96)	1.67(0.72, 3.9)
>= 6 members	47	80	1	1
Sex of child				
Female	40	71	1	1
Male	30	37	1.44(0.77 ,2.67)	1.12(0.49, 2.57)
Age of child				
24-59 months	22	69	1	1
0-23 months	48	39	3.86(2.04, 7.32)*	4.05(1.98, 8.32)**

*Note: - * statistically significant on bi-variant logistic regression analysis at 0.2.*

*: - ** statistically significant on multi-variable logistic regression analysis at 0.05.*

4.5. Factors associated with HSB of mothers for common childhood illness between graduated and not-graduated households

This study had a model to assess health care seeking of mothers on similar explanatory variables for graduated and not-graduated households at the study area.

In bi-variable logistic regression analysis; age of mothers/caregivers, household size, number of under-five children, perceived severity and age of child were statistically associated with health seeking behavior of graduated households while in not-graduated households in addition to those graduated household factors educational status, monthly income and sex of child were significantly associated with HSB.

After adjusting for potential confounders in multivariable logistic regression analysis; for graduated households' age of mothers, educational status, number of household members, perceived severity, age of child and for not- graduated households, educational status, monthly income, number of under-five child, perceived severity, sex of child and age of child were significantly related with health seeking behavior.

In graduated households' mothers with age greater than 30 years' significant factor for health seeking behavior [AOR =2.78(1.55, 4.97)]. Number household members were showed statistically significant association with mother health seeking behavior in graduated households. Households with 2-5 family members 2.7 times more likely to seek health care than households having greater than 6 household members in the household [AOR=2.7(1.5, 4.85)].

Educational status of mothers was also one of the factors that determined HSB of mothers from graduated households. Mothers who have formal education 2.44 times more likely to seek medical care than those having informal education [AOR=2.44(1.2, 4.95)]. Health seeking behavior also determined by the child age, mothers having child age 0-23 months 2 times more likely to seek medical care that those mothers with child age 24-59 months [AOR=2(1.12, 3.58)].

Table 7: - Factors associated with health care seeking behaviors of graduated households of mothers for childhood illness, south Achefer district, west Gojjam, Ethiopia, 2017

Variables	Health seeking behavior for graduated households(n=239)			
	Yes	No	COR(95% CI)	AOR(95% CI)
Age of mothers				
<= 30 years	47	76	1	1
>= 31 years	71	45	2.55(1.52, 4.3)*	2.78(1.55, 4.97)**
Educational status				
Not-formal	65	81	1	1
Formal	53	40	1.65(0.98, 2.79)	2.44(1.2, 4.95)**
Monthly income				
< 1347 birr	50	50	1	1
>= 1347 birr	71	68	1.04(0.57, 1.6)	1.01(0.48, 1.78)
Number of under-5 child				
1 child	87	72	1.91(1.11, 3.3)*	1.64(0.82, 3.28)
2 or more	31	49	1	1
Household size				
2-5 members	71	45	2.55(1.52, 4.29)*	2.7(1.5, 4.85)**
>= 6 members	47	76	1	1
Perceived severity				
Mild	54	80	1	1
Sever	64	41	2.31(1.37, 3.89)*	1.85(1.03, 3.29)**
Sex of child				
Female	55	58	1	1
Male	63	63	1.06(0.64, 1.75)	1.08(0.61, 193)
Age of child				
24-59 months	44	69	1	1
0-23 months	74	52	2.23(1.33, 3.75)*	2(1.12, 3.58)**

*Note: - * statistically significant on bi-variable logistic regression analysis at 0.2.*

*: - ** statistically significant on multi-variable logistic regression analysis at 0.05.*

In not-graduated households' monthly income more than or equal to 1347 ETB 2.6 times more likely to seek health care for common childhood illnesses than lower than 1347 ETB [AOR=2.61(1.27, 5.37)]. Educational status of mothers was showed statistically significant association with HSB of not-graduated households. Mothers with formal education were 2.89 times more likely to seek health care than those had not-formal education [AOR=2.89(1.32, 6.36)]. Sex of ill child was one of the factors that determine the HSB of not-graduated households. Mother who had male child was 2.6 times more likely to seek health care than those having female child [AOR=2.61(1.29, 5.23)] and mothers who had 0-23 months of age were 1.94 times more likely to seek medical care as compared to mothers having 24-59 months of age in the not-graduated households [AOR=1.94(1.03, 3.68)].

Table 8: - Factors associated with health care seeking behaviors of not-graduated households of mothers for childhood illness, south Achefer district, west Gojjam, Ethiopia, 2017

Variables	Health seeking behavior for not-graduated households(n=239)			
	Yes	No	COR(95% CI)	AOR(95% CI)
Age of mothers				
<= 30 years	30	77	1	1
>= 31 years	49	83	1.79(1.02, 3.12)*	1.95(0.98, 3.88)
Educational status				
Not-formal	56	137	1	1
Formal	23	23	2.45(1.27, 4.72)*	2.89(1.32, 6.36)**
Monthly income				
< 1347 birr	38	101	1	1
>= 1347 birr	41	59	1.85(1.07, 3.19)*	2.61(1.27, 5.37)**
Number of under-5 child				
1 child	67	111	2.47(1.22, 4.96)*	2.52(1.09, 5.86)**
2 or more	12	49	1	1
Household size				
2-5 members	26	45	1.25(0.73, 2.24)	1.66(0.78, 3.52)
>= 6 members	53	115	1	1
Perceived severity				
Mild	23	107	1	1
Sever	56	53	4.92(2.73, 8.84)*	5.01(2.59, 9.68)**
Sex of child				
Female	44	118	1	1
Male	35	41	2.24(1.27,3.94)*	2.61(1.29, 5.23)**
Age of child				
24-59 months	31	89	1	1
0-23 months	48	71	1.94(1.12, 3.36)*	1.94(1.03, 3.68)**

*Note: - * statistically significant on bi-variant logistic regression analysis at 0.2.*

*: - ** statistically significant on multi-variant logistic regression analysis at 0.05.*

5. Discussion

This community based comparative cross-sectional study tried to assess factors affecting health seeking behavior between graduated and not-graduated households in south Achefer, west Gojjam, Ethiopia.

Seeking health care for common childhood illnesses from health facility has a great potential to reduce child mortality. In this study, the overall health seeking behavior of mother was 41.2 %(95% CI: 36.8%, 45.6%).

Mothers from graduated households were two times more likely to seek health care than mothers from not-graduated households. This might be due to the awareness of health care for graduated mothers.

Graduating from health extension package was significant for diarrhea than febrile illness and ARI. This could be due to the reason that diarrhea is more visible for mothers than those reported illnesses.

The current study shows 37.2%, 36% and 26.8% of their children had ARI, fever and diarrhea respectively. This finding is similar to Pakistan, 27% of them had fever but lower compared to study done in Zambia, 37.1% and 31.1% of them had diarrhea and fever (25, 26, 35).

Of all the mothers/caregivers, 41.2% (49.4% for graduated and 33.1% for not-graduated) of them were seek medical care. However, it is lower with a study done in Oromia region Ethiopia, 87% of them seeking medical care and Urban slum Dhaka city, 90% of mothers/caregiver sought medical care (24, 51). This difference may be related to the socio-demographic characteristics like educational status, culture, economic status, study period and residences.

Mothers from both graduated and not-graduated who had male children were more likely to seek health care than who had female. This is supported by a study done in Kenya(52). This is due to the fact that in Ethiopia there is a cultural influence in which mother are giving priority for male child than female child.

In the present study age of mothers was significant factor to affect HSB of mothers in graduated households, those who had age greater than/equal 31 years are 2.78 times more likely to seek medical care than that of mothers' age less than 31 years. Studies done in Ethiopia had reported a positive relationship between maternal age (older one) and HSB, which is in agreement with the present study(46). This implies that as the age of mothers' increases, the better HSB and this could be related to life experiences that help to easily identify type of illness and have an exposure or knowledge about treatment options to seek medical care than young mothers.

Number of family members 2-5 had 2.7 times higher to seek medical care as compared to greater than five family members in the graduated household. This might be related to economy of family and shortage of money for medical treatments.

This study showed that income was found to be a determinant to affect mothers' health seeking behavior at not-graduated households; those whose income was greater or equal to 1347 birr were 2.6 times more likely to seek health care than those monthly incomes was less than 1347 birr [AOR=2.61(1.27, 5.37)].The result of the present study was found to be similar with previous study conducted in rural Tanzania, children who lived in the wealthiest household were less

likely experience disease compared to children in the poorest household(53). But it wasn't a predictor for HSB of graduated households and this might due to health information from health extension workers.

The other factor that determined the health seeking behavior in this study was age of children. Mothers from not-graduated household who had 0-23 months 1.94 times more likely to seek medical care than those had children age 24-59 months. This might be due to young infants were highly vulnerable to common childhood illness than elder ones and mothers more seek due to frustration of illness or perceived the illness was more sever.

5.1. Limitation of the study

There is no reference sited to compare between the graduated and not-graduated households' health seeking behavior.

6. Conclusions and Recommendations

6.1. Conclusion

Mothers from graduated household seek health care more than mothers from not-graduated. Age of the mothers, educational status, number of family members, perceived severity and age of child showed a significant association for health seeking behavior of mothers for common childhood illness in graduated households. Whereas educational status, monthly income, number of under-five child, perceived severity, sex of child and age of child showed a significant association for health care seeking behavior of mothers from not-graduated households.

6.2. Recommendations

Based on the above finding and conclusions to better meet health needs and overcome the factors those influence health seeking behavior of both graduated and not-graduated, as well as to minimize the observed gap between graduation status on HSB the study recommends;

For west Gojjam Zone Health Department and south Achefer district Health Office

1. Improve and facilitate family planning services in the community to space and limit number of children.
2. HEWs mobilize to increase the membership status of rural households to join the HEP by creating awareness.
3. The government bodies should intervene the sustainability of graduated households that don't relapse from the graduation status.
4. Education, support and counseling should be given to community at large and particularly to the women regarding the importance of seeking medical care.
5. Deliver pertinent health information and health education regarding common childhood illness to develop knowledge, change attitude towards health and illness as well as to prevent disease and promote health for households regardless of perceived seriousness and duration of diseases.

For researchers

Further investigation on the effect of health extension package completion.

References

1. WHO. World Health Organization Statistics. 2009.

2. UNICEF. Commiting Child Survival Progress Report. United Nations Plaza Newyork; USA 2012.

3. FMOH. Health Extension Program in Ethiopia, Health Extension and Education Centre. Addis Ababa 2007.

4. FMOH. Ethiopia Health extension program implementation revised manual. 2016.

5. FMOH. Health Extension Program in Ethiopia Profile. Health Extension and Education Center, Federal Ministry of Health, Addis Ababa, Ethiopia. June 2007. p. 2.

6. FMOH. Report on the Assessment of Factors Contributing to and Affecting Performance of Health Extension Workers in Selected Woredas of Amhara National Regional State and Southern Nation, Nationalities and People's Region FMOH of Ethiopia Addis Ababa. September 2008.

7. Kelkar S, Mahapatro M. OMMUNITY HEALTH WORKER: A TOOL FOR COMMUNITY EMPOWERMENT. Health and Population Perspectives and issues. 2014;1(37):59-60.

8. USAID. Health Extension Program: An Innovative Solution to Public Health Challenges of EthiopiaA Case Study. Health Systems 2020. March 2012.

9. WHO. Key facts Children reducing mortality January 2016.

10. WHO. Children: reducing mortality. Geneva (Fact Sheet No 178). 2013.

11. UNICEF. Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation. Levels and Trends in Child Mortality 2015.

12. Emily W/J LC, Holly N. and Mark Y. Pneumonia and diarrhea Tackling the deadliest diseases for the world's poorest children. New York,USA: UNICEF, 2012.

13. Chandrashekhar T Sreeramareddy RPS, Binu V Sreekumaran,etal. Care seeking behaviour for childhood illness-a questionnaire survey in western Nepal. BMC international health and human rights. 2006;6:7. PubMed PMID: 16719911. Pubmed Central PMCID: 1543657.

14. CSA. Addis Ababa and Calverton and Central Statistical Agency [Ethiopia] and ICF International,Ethiopia Demographic and Health Survey (EDHS) 2011. 2012.

15. MOFED. Federal Democratic Republic of Ethiopia. Ethiopia MDGs Report. 2012.

16. Webair HH, Bin-Gouth AS. Factors affecting health seeking behavior for common childhood illnesses in Yemen. PMC. 2013;7:1129.

17. Reduce by two thirds, between 1990 and 2015, the under-five mortality rate [Internet]. 2015 [cited 12/9/2016]. Available from: http://www.un.org/millenniumgoals/childhealth.shtml.

18. Improving knowledge of caregivers [Internet]. UNICFE. 2015 [cited 12/9/2016]. Available from: http://www.unicef.org/communities/index_improvingknowledge.html.

19. Ethiopia Statistics [Internet]. 2013 [cited 17/09/2016]. Available from: http://www.unicef.org/infobycountry/ethiopia_statistics.html.
20. WHO. World Health Organization Report. 2012.
21.Olenja J. Health seeking behaviour in context. East African medical journal. 2003;80(2):61-2.
22. Promtussananon S, Peltzer K. Health care seeking behavior for child illnesses among rural mothers in South Africa. ReseachGate. 2014.
23. Anarfi JK, Badasu DM, Yawson A, Atobra D, Abuosi AA, Adzei FA. Religious affiliation and health-seeking behavior related to non-communicable diseases among children in Ghana. International Journal of HealthCare.2(2):60.
24. Mahejabin F, Parveen S, Ibrahim F. Mother's / Care Giver's Health Seeking Behaviour During Childhood Illness in an Urban Slum of Dhaka city. 2014;7:6-7.
25. Anwar H, HM Durrani , Kumar R, Durrani S. Recognizing the danger signs and health seeking behaviour of mothers in childhood Illness. Universal Journal of Public Health 2015;3(2):49-54.
26. Sreeramareddy CT, Sathyanarayana TN, Kumar HNH. Utilization of Health Care Services for Childhood Morbidity and Associated Factors in India: A National Cross-Sectional Household Survey. PLoS ONE. 2012;7(12):e51904.
27. Shaw R, Amouzou A, Miller NP, Tsui AO, Bryce J, Tafesse M, et al. Determinants of Utilization of Health Extension Workers in the Context of ScaleUp of Integrated Community Case Management of Childhood Illnesses in Ethiopia American Society of Tropical Medicine and Hygiene. 2015.
28. Assefa T, Tegegn T, Deribew A. Health care seeking behavior for childhood illness in Derra district, North Shoa zone, Oromia Regional State, Ethiopia. Ethiop J Health Science. 2014:87.
29. Sisay S, Endalew G, Hadgu G. Assessment of Mothers/care givers health seeking behaviour for childhood illness in rural Ensaro District Ethiopia. Global Journal of Life Sciences and Biological Research 2014;1(1):30.
30. UNICEF. Pneumonia and diarrhea Tackling the deadliest diseases for the world's poorest children. 2012.
31. Miller NP, Amouzou A, Tafesse M, Hazel E, Legesse H, Degefie T, et al. Integrated Community Case Management of Childhood Illness American Society of Tropical Medicine and Hygiene. 2014.
32.Committing to Child Survival: A Promise Renewed Progress Report [Internet].2013[cited12/9/2016].Availablefrom :http://www.unicef.org/lac/Committing_to_Child_Survival_APR_9_Sept_2013.pdf.

33. Burtscher D, Burza S. Health-seeking behaviour and community perceptions of childhood undernutrition and a community management of acute malnutrition (CMAM) programme in rural Bihar, India. ENN is a registered charity in the UK. 2015.
34. Mukiira C, Ibisomi L. Health care-seeking practices of caregivers of under-five children with diarrheal diseases in two informal settlements in Nairobi, Kenya. African Population and Health Research Center (APHRC). 2014.
35. Katepa-Bwalya M, Masaninga F, Kalesha-Masumbu P, Malumo1 S, Kankasa C, Babaniyi O, et al. Prevalence of common childhood illnesses and immunization status in infants and young children in two districts of Zambia. Journal of Public Health and Epidemiology. July 2014;6(8):246-51.
36. Muraga KD. Assessment of Factors Affecting Initiation of Early Care Seeking Behavior Among Mothers and Child Care Takers of Under Five Children Having Acute Diarrhea Attending Integrated Management of Neonatal and Child Hood Illness Clinic in Governmental Health Centers, Addis Ababa, Ethiopia. 2014.
37. Sreeramareddy CT, Shankar RP, Sreekumaran BV, Subba SH, Joshi HS, Ramachandran U. Care seeking behaviour for childhood illness- a questionnaire survey in western Nepal. 2006.
38. Ekpo O. Careseeking for childhood diarrhea at the primary level of care in communities in Cross River State, Nigeria. J Epidemiol Glob Health. 2016 Sep 14. PubMed PMID: 27639039. Epub 2016/09/18. Eng.
39. Aigbokhaode QA, Isah CE, Isara RA. Health seeking behaviour among caregivers of under-five children in Edo State, Nigeria. SEEJPH. 2014.
40. Kanté AM, Gutierrez HR, Larsen AM, Jackson EF, Helleringer S, Exavery A, et al. Childhood illness Prevalnce and Health Seeking Brhavior Patterns in Rural Tanzania. BMC Public Health. 2015.3
41. Philip D, Pilingana P, Siazeele K, Busiku Hamainza, MacLeod WB, Yeboah-Antwi K. Impact of Integrated Community Case Management on Health-Seeking Behavior in Rural Zambia. The American Society of Tropical Medicine and Hygiene. 2012:108.
42. Andersen, Newman. Andersen and Newman Framework of Health Services Utilization. 1990.
43.Ghosh N, Chakrabarti I, Chakraborty M, Biswas R. Factors affecting t he healthcare-seeking behavior of mothers regarding their children. . International Journal of Medicine and Public Health Jan-Mar 2031;3(1).
44. Geldsetzer P, Williams TC, Kirolos A, Mitchell S, Ratcliffe LA, Kohli-Lynch MK, et al. The Recognition of and Care Seeking Behaviour for Childhood Illness in Developing Countries: A Systematic Review. PLoS ONE. 2014;9(4):e93427.

45. Molyneux S, Muga'ala S, Harpham T, Snow W. Maternal responses to childhood fevers: a comparison of rural and urban residents in coastal Kenya. Trop Med Int Health. 1999;4(12):836-45.
46. Gelaw YA, Biks GA, Alene KA. Effect of residence on mothers' health care seeking behavior for common childhood illness in Northwest Ethiopia. BioMed Central. 2014;7(1):7-8.
47. UNICEF. The State of World's children. UNICEF. 2008.
48. Mbagaya G, Odhiambo M, Oniang'o R. Mother's health seeking behavior during child illness in a rural western Kenya community. Afr Health Science. 2005;5(4).
49. UNICEF. Pneumonia and diarrhea tackling the deadliest diseases for the world's poorest children. UNICEF New York USA. 2012
50. BoFD. Amhara regiona state beruea of finance and development Conversion factors of socio demographic indicators. 2016.
51. Taffan N, Chepngeno G. Determinants of health care seeking for childhood illnesses in Nairobi slums. J Trop Med Int health. 2005;10(3):40-5.
52. Kante A, Larsen M, Jackson F. Childhood illness prevalence and health seeking behavior patterns in rural Tanzania. BMC Public Health. 2015.

Annex

I. Participant Information Sheet

Good morning/ afternoon? My name is _____. I am nurse in profession. We are interviewing under five children with common childhood illness before 15 days. I am member of the research team which is undergone by the principal investigator Yihun Shegnew currently enrolled and graduate student at Bahir Dar University, College of Medicine and Health Science School of Public Health. And now I am conducting a research to assess health extension package completion and mothers' health seeking behaviors for common child hood illness in south Achefer selected kebeles.

Title of the research: Health extension package completion and mothers'/care givers for common childhood illness in South Achefer District.

Objective: To assess health extension package completion and mothers'/care givers for common childhood illness in South Achefer District 2016.

Participants: Randomly selected mothers having children less than 5 years old in the selected rural kebeles of the district.

Potential Risks: There is no foreseen risk by being participating in this study.

Benefits: No financial benefits are related with this study. But by participating in this study, you will acquire or increase knowledge related to the practice of your health seeking behaviors of your under 5 children during common childhood illness.

I would like to ask you few questions. Your honest response to the questions can make the study to achieve its objective. All the information that you give will be kept confidential and private. Only the principal investigator and interviewer will have access to the information. You are kindly requested to respond voluntarily. You can also choose not to participate in this study or if you become uncomfortable during the study, you will be allowed to leave the study at any time. At any time if you have questions, you can contact me by using the following addresses.

Yihun Shegnew, Mobile: +251 913 94 29 23

E-mail: yihunshegnew@gmail.com

II. Consent form

I herewith declare that:

- ✓ The objectives of this study are explained to me and are clear.
- ✓ The contents of the consent are verified to me to participate in the study.

I understand that participation in this study is completely voluntary and that I may withdraw at any time without supplying reasons. I agree to participate in this study to be interviewed, provided my privacy is guaranteed. When signing this consent form to participate in the study, I promise to answer honestly to all reasonable questions and not provide any false information or in any other way purposely mislead the objective of researcher.

Signature of the participant_____ date _____

Signature of the investigator_____ date _____

III. English version questionnaires

Household Id
_____

I. Socio-demographic characteristics related questions			
S.No.	**Questions**	**Response categories**	**code**
101	Who is the caretakers of the child?	1. Mother 2. Father 3. Grandmother 4. Relatives 5. Others (specify)	
102	Age of mothers/caregivers in completed years?		
103	Ethnicity?	1. Amhara 2. Oromo 3. Agew 4. Others(specify)	
104	Marital status?	1. Single 2. Married 3. Divorced 4. Widowed	
105	Religion?	1. Orthodox 2. Muslim 3. Protestant 4. Others (specify)	
106	Educational status?	1. Unable to read & write. 2. Can read & write only 3. Primary school (1-8) 4. Secondary school (9-12) 5. Above grade 12	
107	What is your occupation?	1. Farmer 2. Merchant 3. Government employee 4. House wife 5. Daily laborer 6. Other(specify)	
108	Monthly income?	_____ETB	
109	Number of family members?		
110	Number of children less than five years in the family?	_____	
111	Sex of the ill child?	1. Male 2. Female	
112	Age of ill child in months?	_____	
113	Is the household graduated from the health extension package program?	1. Yes 2. No	
114	How many years after the first graduation?	_____ years	

II.	**Mother's health seeking behavior for childhood illness**		
A.	**Health seeking behavior of mothers for common childhood diarrhea**		
201	Has your child had diarrhea in the last two weeks?	1. Yes 2. No► Q209	
202	Did you seek advice or treatment for the diarrhea from any source?	1. Yes 2. No	
203	Where did you seek advice or treatment? [more than one answer is possible]	1. Home ► Q207 2. Traditional healers ► Q207 3. Health facility 4. Others(specify)	
204	In Q203 the answer is 3 who decide to go to the health facility?	1. Mother 2. Father 3. Grandmother 4. Other(specify)	
205	How many days after diarrhea begun did you first seek medical care for your child?	1. On the same day of illness► Q207 2. After one day of illness 3. After two days of illness 4. After three or more days of illness	
206	What was that made you to stay for a day or more than a day before seeking medical care with your sick child? [Q205 answers 2, 3 or 4]	1. Thought the child would get better 2. Lack of transportation 3. Far of health facility 4. Wanted to try home remedies first	
207	If your child has got sickness; according to your perception how sever was your child illness?	1. Sever 2. Moderate 3. Mild	
208	How do you identify the severity of illness on your child?	1. By combined symptoms of the disease 2. My child refused to eat 3. The illness continues for long time 4. Others(specify)	
B.	**Health seeking behavior of mothers for common childhood febrile illness**		
209	Has your child been ill with a fever at any time in the last two weeks?	1. Yes 2. No ► Q217	
210	Did you seek advice or treatment for the diarrhea from any source?	1. Yes 2. No	
211	Where did you seek advice or treatment? [multiple choices are possible]	1. Home► Q215 2. Traditional healers►Q215 3. Health facility 4. Others(specify)	
212	In Q211the answer is 3 who decide to go to the health facility?	1. Mother 2. Father 3. Grandmother 4. Other(specify)	
213	How many days after the onset of fever did you first seek advice or treatment for your child?	1. On the same day of illness 2. After one day of illness 3. After two days of illness 4. After three or more days of illness	
214	What was that made you to stay for a	1. Thought the child would get better 2. Lack of transportation	

	day or more than a day before seeking medical care with your sick child? [Q213 answers 2, 3 or 4]	3. Far of health facility 4. Wanted to try home remedies first	
215	If your child has got sickness; according to your perception how sever was your child illness?	1. Sever 2. Moderate 3. Mild	
216	How do you identify the severity of illness on your child?	1. By combined symptoms of the disease 2. My child refused to eat 3. The illness continues for long time 4. Others(specify)	
C. Health seeking behavior of mothers for common childhood ARI illness			
217	Has he/she had an illness with a cough at any time in the last two weeks?	1. Yes 2. No ► Q301	
218	Did you seek advice or treatment for ARI from any source?	1. Yes 2. No	
219	Where did you seek advice or treatment?	1. Home► Q223 2. Traditional healers► Q223 3. Health facility 4. Others(specify)	
220	In Q219 the answer is 3 who decide to go to the health facility?	1. Mother 2. Father 3. Grandmother 4. Other(specify)	
221	How many days after the onset of fever did you first seek advice or treatment for your child?	1. On the same day of illness► Q223 2. After one day of illness 3. After two days of illness 4. After three or more days of illness	
222	What was that made you to stay for a day or more than a day before seeking medical care with your sick child?	1. Thought the child would get better 2. Lack of transportation 3. Far of health facility 4. Wanted to try home remedies first	
223	If your child has got sickness; according to your perception how sever was your child illness?	1. Sever 2. Moderate 3. Mild	
224	How do you identify the severity of illness on your child?	1. By combined symptoms of the disease 2. My child refused to eat 3. The illness continues for long time 4. Others(specify)	

Factors affecting health care seeking behaviors of mothers			
301	What was your reason for choosing home treatment? [multiple choice is possible]	1. Good personal experience 2. Perception of cause 3. Not sever 4. Inexpensive 5. Proximity 6. Didn't know other treatment methods 7. Others(specify)	
302	What was your reason for seeking from traditional treatment? [multiple choice is possible]	1. Perceived cause 2. Perceived severity 3. Inexpensive 4. They are respectful 5. Good reputation 6. Proximity 7. Family recommend it 8. Good services 9. Good personal experiences 10. Didn't know other treatment methods 11. Others(specify)	
303	What were your reasons for not seeking treatment from health facility? [multiple choice is possible]	1. Not severe enough 2. Didn't trust treatment 3. Unavailability of trained personnel 4. Not enough money 5. Too far away 6. Couldn't get transport 7. Family would not let me 8. Religious reason 9. Prolonged waiting time 10. Others(specify)	

III. የተሳታፊዎች መረጃ መስጫ ቅጽ-በአማርኛ

ሠላም እንደ ምን አደሩ/ዋሉ? እባላለሁ፡፡ _____ እባላለሁ በባህር ዳር ዩኒቨርስቲ የህክምና ጤና ሳይንስ ኮሌጅ፣ የህብረተሰብ ጤና ትምህርት ክፍል የ2ኛ ዓመት የማስትሬት ድግሪ ተመራቂ ተማሪ የሆነው አቶ ይሁን ሸኘው በአሁኑ ሰዓት በደቡብ አቸፈር ወረዳ ከአምስት አመት በታች ህፃናት ባላቸው እናቶች ላይ በጤና ኤክስቴንሽን ፓኬጅ መመረቃቸው በልጅነት ጊዜ በሽታ በሚታመሙበት ጊዜ ጤናን የመሻት ባህርያት ተዕዕኖን ለማጥናት በሚደረገው ጥናት አባል ሆኝ ነው፡፡

የጥናቱ ርዕስ፡- በጤና ኤክስቴንሽን ፓኬጅ መመረቅ እናቶች ለልጅነት ጊዜ በሽታ ጤናን የመሻት ባህርያት ላይ ያለው ተዕዕኖ፣ ደቡብ አቸፈር፣ አብክመ፣ ኢትዮጵያ፣2009 ዓ.ም፡፡

የጥናቱ ዓላማ፡-በጤና ኤክስቴንሽን ፓኬጅ መመረቅ እናቶች ለልጅነት ጊዜ በሽታ ጤናን የመሻት ባህርያት ላይ ያለው ተዕዕኖ ማወቅ፡፡

ተሳታፊዎች፡- ከአምስት አመትና በታች ልጆች ያሏቸውና በቋሚነት የሚኖሩ እማወራዎች

የጎንዮሽ ጉዳት፡- በዚህ ጥናት መሳተፍ ምንም አይነት ጉዳት የለውም፡፡

ጥቅማ ጥቅም፡- በዚህ ጥናት መሳተፍ ምንም አይነት ገንዘብ አያስገኝም፡፡ ነገር ግን በዚህ ጥናት መሳተፍ እናቶች ለልጅነት ጊዜ በሽታ ጤናን የመሻት ባህርያት ላይ እውቀት ያገኛሉ ወይም ያለዎትን እውቀት ያዳብራሉ፡፡ ስለዚህ የተወሰኑ ጥያቄዎችን ልጠይቅዎት እወዳለሁ፡፡ የእርስዎ በእውነት ላይ የተመሰረተ መልስ ለዚህ ጥናት መሳካት አስተዋፅኦ ያደርጋል፡፡ እርስዎ የሚሰጡት መረጃ ከአጥኚውና ቃለመጠይቅ አድራጊው በስተቀር በማንኛውም መልኩ ለሌላ 3ኛ ወገን ተላልፎ አይሰጥም፡፡ በሙሉ ፈቃደኝነት እንዲሳተፉ እየጠየቅሁ ያለመሳተፍ ወይም በማንኛውም ጊዜ ራስዎን ከጥናቱ የማግለል ሙሉ መብት አለዎት፡፡ ማንኛውም ጥያቄ ካለዎት በሚከተለው አድራሻዬ ማግኘት ይችላሉ፡፡

ይሁን ሸኘው

ሞባይል: +251 913 94 29 23

ኢ. ሜይል: yihunshegnew@gmail.com

IV. የስምምነት መግለጫ ፎርም - በአማርኛ

እኔ ስሜ ከዚህ በታች የተገለፀው፤ የዚህ ጥናት ዓላማ በደንብ የተብራራልኝ ሲሆን የጥናቱንም ዓላማ ተረድቻለሁ፡፡

በዚሁ ጥናት ላይ መሳተፍ በሙሉ ፈቃደኝነት ላይ የተመሰረተ መሆኑን በሚገባ የተረዳሁ ሲሆን በማንኛውም ጊዜ ከጥናቱ ራሴን የማግለል መብት እንዳለኝ አውቄአለሁ፡፡ ስለሆነም የምሰጠው መረጃ እስከተጠበቀ ድረስ በዚህ ጥናት ለመሳተፍ ተስማምቻለሁ፡፡ በዚህ ጥናት ለመሳተፍ ስምምነቴን ስገልፅ ለምጠየቀው ጥያቄ በእውነት ላይ የመሰረተ መልስ ለመስጠት የተስማማሁ መሆኔን አረጋግጣለሁ፡፡

የመረጃ ሰጪው ፊርማ _____ ቀን _____

የአጥኚው ፊርማ _____ቀን _____

የቤተሰብ መለያ ቁጥር

V. አማርኛ መጠይቅ

ክፍል 1. ማህበራዊና ስነ- ህዝባዊ መረጃ		
ተ. ቁ	ጥያቄዎች	አማራጭ መልሶች
101	የህፃኑ አሳዳጊ ወይም ተንከባካቢ ማን ነው	1. እናት 2. አባት 3. ሴት አያት 4. ዘመድ 5. ሌላ (ይገለፅ)
102	የህጻኑ እናት/አሳዳጊ በሙሉ አመት ይመዘገብ	
103	ብሄር	1. አማራ 2. ኦሮሞ 3. አገው 4. ሌላ(ይገለፅ)
104	የጋብቻ ሁኔታ	1. ያገባ 2. የተፋታ 3. የተለያየ 4. የሞተባት
105	ሀይማኖት	1. ኦርቶዶክስ 2. ሙስሊም 3. ፕሮቴስታንት 4. ሌላ (ይገለፅ)
106	የትምህርት ሁኔታ	1. ማንበብና መፃፍ የማይችሉ 2. ማንበብና መፃፍ የሚችሉ 3. የመጀመሪያ ደረጃ (1-8) 4. ሁለተኛ ደረጃ (9-12) 5. ከ 12ተኛ በላይ
107	የእናት/አሳዳጊ የስራ ሁኔታ	1. ኦርሶ አደር 2. ነጋዴ 3. የመንግስት ሰራተኛ 4. የቤት እመቤት 5. የቀን ሰራተኛ 6. ሌላ(ይገለፅ)
108	የወርሃዊ ገቢ	_____ብር
109	የቤተሰብ አባላት ብዛት	
110	በቤተሰቡ ውስጥ ከአምስት አመት በታች ልጆች ብዛት	
111	የታመመው/ችው ልጅ ፆታ	1. ወንድ 2. ሴት
112	የታመመው/ችው ልጅ ዕድሜ በወር	_____
113	ቤተሰቡ በጤና ኤክስቴንሽን ፕሮግራም ተመርቋል	1. አዎ 2. የለም
114	አሁን ቤተሰቡ ከተመረቀ ስንት አመት ሆኖታል	_____ አመት

ክፍል 2. እናቶች ልጆጃቸው ሲታመሙ ያላቸውን ጤናን የመሻት ፍላጎት በተመለከተ የሚጠየቅ		
ሀ. እናቶች ልጆቻቸው በተቅማጥ ሲታመሙ ጤናን የመሻት ፍላጎት		
201	ባለፉት ሁለት ሳምንታት ውስጥ ህፃኑ/ኗ የተቅማጥ ህመም አሞብዎት ነበር	1. አዎ 2. የለም ▶ጥያቄ 209
202	ህጻኑ/ኗ የህክምና ዕርዳታ ተደርጎለት/ላት ነበር	1. አዎ 2. የለም
203	የህክምና ዕርዳታው የት ነበር የተደረገው [ከአንድ በላይ አማራጭ መልስ መመለስ ይቻላል]	1. በቤት ▶ ጥያቄ 207 2. ባህላዊ ህክምና▶ ጥያቄ 207 3. የጤና ተቋም 4. ጤና ኤክስቴንሽን ሰራተኛ ▶ጥያቄ 207 5. ሌላ(ይገለፅ)
204	በጥያቄ 203 መልሱ ኮድ 3 ከሆነ እና ህፃኑ/ኗ ወደ ጤና ተቋም መሄድ እንዳለበት የወሰነ ማን ነበር	1. እናት 2. አባት 3. ሴት አያት 4. ሌላ(ይገለፅ)
205	ተቅማጡ በጀመረው በስንተኛው ቀን ነው ወደ ህክምና ተቋም የወሰዳችሁት	1. ህመሙ እንደጀመረ ▶ጥያቄ 207 2. ከአንድ ቀን በኋላ 3. ከሁለት ቀን በኋላ 4. ከሦሥትና ከዚያ በላይ ቀን በኋላ
206	በጥያቄ 206 መልሱ 2፣3 እና 4 ከሆነ እንድትዘገዩ ያደረጋችሁ ምንድን ነው	1. ይሻለዋል/ታል በማለት 2. ትራንስፖርት አጥቸ 3. ጤና ተቋሙ እሩቅ ስለሆነ 4. በመጀመሪያ የቤቱን ልሞክር ብየ
207	በእርስዎ እይታ፣ የልጅዎ ተቅማጥ የህመም ስሜት ከየትኛው ክፍል ይመደባል	1. ከፍተኛ 2. መካከለኛ 3. ዝቅተኛ
208	የልጅዎ የህመም ስሜት እየተባባሰ መሆኑን በምን ያውቃሉ	1. የተለያዩ የህመም ምልክቶች ሲሳይ 2. ህፃኑ/ኗ መመገብ ሲያቆም/ስታቆም 3. የህመም ስሜቱ ለብዙ ጊዜ ሲቆይ 4. ሌላ(ይገለፅ)
ለ. እናቶች ልጆቻቸው በትኩሳት ሲታመሙ ጤናን የመሻት ፍላጎት		
209	ባለፉት ሁለት ሳምንታት ውስጥ ህፃኑ/ኗ የትኩሳት ህመም አሞብዎት ነበር	1. አዎ 2. የለም ▶ጥያቄ 217
210	ህጻኑ/ኗ የህክምና ዕርዳታ ተደርጎለት/ላት ነበር	1. አዎ 2. የለም
211	የህክምና ዕርዳታው የት ነበር የተደረገው [ከአንድ በላይ አማራጭ መልስ መመለስ ይቻላል]	1. በቤት ▶ጥያቄ 215 2. ባህላዊ ህክምና ▶ጥያቄ 215 3. የጤና ተቋም 4. ጤና ኤክስቴንሽን ሰራተኛ ▶ጥያቄ 215 5. ሌላ(ይገለፅ)
212	በጥያቄ 212መልሱ ኮድ 3 ከሆነ እና ህፃኑ/ኗ ወደ ጤና ተቋም መሄድ እንዳለበት የወሰነ ማን ነበር	1. እናት 2. አባት 3. ሴት አያት 4. ሌላ(ይገለፅ)
213	ትኩሳቱ በጀመረው በስንተኛው ቀን ነው ወደ ህክምና ተቋም የወሰዳችሁት	1. ህመሙ እንደ ጀመረ▶ ጥያቄ 215 2. ከአንድ ቀን በኋላ 3. ከሁለት ቀን በኋላ

		4. ከሦሥትና ከዚያ በላይ ቀን በኋላ
214	በጥያቄ 215 መልሱ 2፣3 እና 4 ከሆነ እንድትዘገዩ ያደረጋችሁ ምንድን ነው	1. ይሻለዋል/ታል በማለት 2. ትራንስፖርት አጥቸ 3. ጤና ተቋሙ እሩቅ ስለሆነ 4. በመጀመሪያ የቤቱን ልሞክር ብየ
215	በእርስዎ እይታ፣ የልጅዎ ትኩሳት የህመም ስሜት ከየትኛው ክፍል ይመደባል	1. ከፍተኛ 2. መካከለኛ 3. ዝቅተኛ
216	የልጅዎ የህመም ስሜት እየተባባሰ መሆኑን በምን ያውቃሉ	1. የተለያዩ የህመም ምልክቶች ሲሳይ 2. ህፃኑ/ኗ መመገብ ሲያቆም/ስታቆም 3. የህመም ስሜቱ ለብዙ ጊዜ ሲቆይ 4. ሌላ(ይገለፅ)
ሐ. እናቶች ልጆቻቸው በአጣዳፊ የመተንፈሻ አካል ህመም ሲታመሙ ጤናን የመሻት ፍላጎት		
217	ባለፉት ሁለት ሳምንታት ውስጥ ህፃኑ/ኗ በአጣዳፊ የመተንፈሻ አካል ህመም አሞብዎት ነበር	1. አዎ 2. የለም► ጥያቄ 301
218	ህጻኑ/ኗ የህክምና ዕርዳታ ተደርጎለት/ላት ነበር	1. አዎ 2. የለም
219	የህክምና ዕርዳታው የት ነበር የተደረገው [ከአንድ በላይ አማራጭ መልስ መመለስ ይቻላል]	1. በቤት► ጥያቄ 223 2. ባህላዊ ህክምና► ጥያቄ 223 3. የጤና ተቋም 4. ጤና ኤክስቴንሽን ሰራተኛ► ጥያቄ 223 5. ሌላ(ይገለፅ)
220	በጥያቄ 219መልሱ ኮድ 3 ከሆነእና ህፃኑ/ኗ ወደ ጤና ተቋም መሄድ እንዳለበት የወሰነ ማን ነበር	1. እናት 2. አባት 3. ሴት አያት 4. ሌላ(ይገለፅ)
221	ትኩሳቱ በጀመረው በስንተኛው ቀን ነው ወደ ህክምና ተቋም የወሰዳችሁት	1. ህመሙ እንደ ጀመረ► ጥያቄ 223 2. ከአንድ ቀን በኋላ 3. ከሁለት ቀን በኋላ 4. ከሦሥትና ከዚያ በላይ ቀን በኋላ
222	በጥያቄ 215 መልሱ 2፣3 እና 4 ከሆነ እንድትዘገዩ ያደረጋችሁ ምንድን ነው	1. ይሻለዋል/ታል በማለት 2. ትራንስፖርት አጥቸ 3. ጤና ተቋሙ እሩቅ ስለሆነ 4. በመጀመሪያ የቤቱን ልሞክር ብየ
223	በእርስዎ እይታ፣ የልጅዎ ትኩሳት የህመም ስሜት ከየትኛው ክፍል ይመደባል	1. ከፍተኛ 2. መካከለኛ 3. ዝቅተኛ
224	የልጅዎ የህመም ስሜት እየተባባሰ መሆኑን በምን ያውቃሉ	1. የተለያዩ የህመም ምልክቶች ሲሳይ 2. ህፃኑ/ኗ መመገብ ሲያቆም/ስታቆም 3. የህመም ስሜቱ ለብዙ ጊዜ ሲቆይ 4. ሌላ(ይገለፅ)

ክፍል 3. እናቶች ወደ ህክምና ተቋም እንዳይሄዱ የሚያደርጓቸው ምክንያቶች

301	ልጅዎ ሲታመም በቤት ውስጥ ህክምና እንዲገኝ ያደረጉበት ምክንያት ምንድን ነው (ከአንድ በላይ መልስ መመለስ ይቻላል)	1. ጥሩ ልምድ ስላለኝ 2. የህመሙን መንስኤ በመረዳት 3. ለከፋ ነገር አይሰጠውም ብየ በማሰብ 4. የቤት ውስጥ ህክምናው ውድ ስላልሆነ 5. ለቅርበቱ ብየ 6. ሌላ ህክምና መኖሩን ባለማወቅ 7. ሌላ(ይገለፅ)
302	ልጅዎ ሲታመም ወደ ባህላዊ ህክምና/አዋቂ ቤት የወሰዱበት ምክንያት ምንድን ነው (ከአንድ በላይ መልስ መመለስ ይቻላል)	1. የበሽታውን መንስኤ በመረዳት 2. የበሽታውን ጎጅነት በመረዳት 3. ውድ ስላልሆነ 4. በህክምና ጊዜ ስለሚያከብሩ 5. Good reputation 6. ቅርብ ስለሆነ 7. ቤተሰቤ ህክምናውን እንድጠቀም ስለነገሩኝ 8. ጥሩ አገልግሎት ስላለ 9. ጥሩ ልምድ ስላላቸው 10. ሌላ ህክምና መኖሩን ባለማወቅ 11. ሌላ(ይገለፅ)
303	ልጅዎ አሞብዎት በነበረበት ጊዜ ወደ ህክምና ተቋም ያልወሰዱበት ምክንያት ምንድን ነው (ከአንድ በላይ መልስ መመለስ ይቻላል)	1. በጠና ስላላመመው 2. ህክምናው ያሽለዋል ብየ ስለማላስብ 3. የሰለጠነ ባለሙያ ስሌለ 4. በቂ ገንዘብ ስሌለኝ 5. በጣም ሩቅ ስለሆነ 6. የመንገዳ ትራንስፖርት ስሌለ 7. ቤተሰቤ ወደ ህክምና እንድሄድ ስላልፈቀደ 8. ሀይማኖቴ ስለማይፈቅድ 9. ህክምና እርዳታ ለማግኘት ብዙ ጊዜ ስለምንጠብቅ 10. ሌላ(ይገለፅ)