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Assessment of Mothers/Care Givers Health Care Seeking Behavior for Childhood Illness in Rural Ensaro District, North Shoa Zone, Amhara Region, Ethiopia 2014

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Abstract

Introduction: The practice of appropriate health care seeking has a great potential to reduce the occurrence of severe and life-threatening childhood illnesses. However, varieties of factors have been identified as the leading causes of poor utilization of primary health care services. Poor socio-economic status, lack of physical accessibility, attitude to modern treatment, low literacy level of the mothers, large family size, number of symptoms, previous experience of child death, and perceived severity of illness were the predictors of care seeking behavior

Objective: To assess mothers/care givers health care seeking behavior and its determinants for childhood illnesses

Methodology: The study employed both quantitative and qualitative data collection methods with face to face prepared questionnaire for quantitative and focus group discussion for qualitative study from April 11 to May 10/2014. For quantitative data template was prepared and the data was entered, categorized, coded, and summarized using EPI 3.5.3 and transformed to SPSS version 20.00 for further analysis. Bivariate and multivariate logistic regression analysis was done to see the association of each categories of variable with the outcome variable. Significance was checked at 95% CI with p-value <0.05.

Result: Regarding child hood illness 4 weeks preceding the study. 212 (33.1%) children had illness. Most of the respondents 438(68.3%) believed that there were childhood illness that could not be treated by modern medicine
Mothers/ caregivers who had diploma and above education level were more likely to seek health care than those who were illiterate and Place of residence also appeared as an important factor that influenced healthcare-seeking, with residents urban more likely seek health care than rural residence.

Conclusion and Recommendation: The critical predictors of healthcare-seeking identified using multivariate analysis are; place of residence, educational status of the mothers/care givers, age of the mothers /care givers, distance of the health facility and private drug shop owner. Efforts should be done by government and non-governmental organization to improve the mothers' health seeking behavior by providing information, education and behavioral change communication.

Key words: *Mothers/Care Givers, Health Care Seeking Behavior, Childhood, Illness, Rural District*

1. INTRODUCTION

1.1. Background

Regardless of a significant progress has been made in reducing mortality in children less than five years of age, about 6.9 million children of under five years died in 2011 worldwide. Children in Sub-Saharan Africa(SSA) are about 16.5 times more likely to die before the age of five years than children in developed region(1-2).More than half of these deaths were due to preventable conditions where access to simple and affordable interventions was possible. Leading causes of death were pneumonia, preterm birth complications, diarrhea, birth asphyxia, malaria(3) and under nutrition contributed to more than a third of these deaths(4). About 49 percent of the world's under-five deaths occur in SSA, yet only 22 percent of all the children in the world are born in this region(5). It is often cited that 80% of people living in sub Saharan Africa have previously used traditional medicines(6).

In Ethiopia the utilization of modern medicine could be dated back to start with the 16th century particularly during the reign of Emperor Liben Dingel. More recently the development and expansion of modern health services were started in 1930s, followed by the establishment of ministry of health (MOH) in 1948. Since then MOH was the major provider of modern health services in Ethiopia, other health service like military, large corporation and state farms have directly participated in provision of health care under government rule. Private clinics, drug retailers, and nongovernmental hospital are also secondary health care providers in the community(7).

Considerable progress has been made towards achieving Millennium Development Goal four (MDGs 4). Since 1990, the global under-5-year-old mortality rate (U5MR) has dropped from 87 deaths per 1,000 live births in 1990 to 51 deaths per 1,000 live births in 2011. But the rate of this reduction is still insufficient to reach the target of a two-thirds reduction of 1990 mortality levels by the year 2015(3). There has been less than satisfactory progress, especially in sub-Saharan Africa, towards the child and maternal mortality targets of Millennium Development Goals four (MDGs 4). The Countdown group reported that most of 68 target countries had made little or no progress towards the child survival target, and that 12 countries in sub-Saharan Africa had actually seen reversals in child survival rates(8).
Ethiopia is one of the 189 countries that signed the Millennium Declaration. The UN (United Nation) Millennium Development Goals (MDG 4) calls for Ethiopia to reduce child mortality by a two-third by the year 2015. Pursuant of these goals, the Ethiopian Ministry of Health has undertaken a number of important public health initiatives aimed at improving the health outcomes of women and children. One of these initiatives is the launching of the Health Services

Extension Program (HEP) in 2003; an innovative way of scaling up the delivery of essential health interventions targeting the household and community level(9).

Parents in all societies raise their children in a way that is generally compatible with the demands of their physical environment, socio-economic conditions, demographic characteristics, and the belief system that has been ingrained in their society. Categorizations of health seeking pattern for children can be grouped as reoccurring determinants and placed into key spheres of influence like informal and formal infrastructure. A recent study conducted in the rural area of Bangladesh that 86% of women received health care from non-qualified health care providers(10).

1.2. Statement of the Problem

Of the estimated 8·8 million deaths of children younger than 5 years worldwide in 2008, infectious diseases caused 68% (6 million), with the largest proportions due to pneumonia (18%, 1·6 million), diarrhoea (15%, 1·3 million) and malaria (8%, 0·7 million)(11).

The highest rates of child mortality continue to be in Sub-Saharan Africa where, in 2009, one in every eight children (129 per 1000 live births) died before their fifth birthday a level nearly double the average in the developing region as a whole (66 per 1000) and around 20 times the average for developed regions (6 per 1000)(12).

Delays in seeking appropriate medical care is one of the major factors contributing to severe disease among children presenting to hospitals with severe forms of malaria, pneumonia and diarrhoea(13)

Ethiopia is among the six countries that account for 50% of children under-five mortality globally, with 194,000 deaths every year (14). 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 (15) , 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 (16). In response to the country's health problem the government introduces Health Extension Program (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 (17).

The practice of appropriate health care seeking has a great potential to reduce the occurrence of severe and life-threatening childhood illnesses. However, varieties of factors have been identified as the leading causes of poor utilization of primary health care services. Poor socio-economic status, lack of physical accessibility, attitude to modern treatment, low literacy level of the mothers, large family size, number of symptoms, previous experience of child death, and perceived severity of illness were the predictors of care seeking behavior(18-19).

Lack of health insurance coverage especially among the low-income family also influences health- seeking behavior (19).

Different ethnic groups and cultures recognized different illness, symptoms and causes and have developed different health- care system and treatments strategies (20). Mothers in developing countries, however, often do not have sufficient knowledge of signs that their child's health is in danger, or of appropriate treatments, or access to appropriate health services. Poor mothers are also more likely to live in remote areas, which can lead to delays in seeking care, and to fatalities. A mother's care-seeking behavior is therefore particularly important in resource-poor countries (21).

1.3. Significance of the Study

Children less than five years worldwide are known to be vulnerable and susceptible in many respects, especially on matters on health. Nutritional deficiencies and malnutrition generally affect children more than any other group. Health-seeking behaviors is a function not only of the availability of health facilities and other sources of healthcare but also motivation and ability of individuals to seek medical treatment (22)

Detail information in the local setting was lacking. Findings from this study are intended to inform the local health extension workers and planners about the prevalence of illness among children under five years of age and care seeking behavior of mothers/care givers during child hood illness. Additionally, care givers/parents/ as a members of community or ethnic group or cultural groups they have their own belief system that explain illness, its causes and its consequences and depending on these, they have developed different health care system and treatment strategies. Similarly an individual's decision about household management of illness and about when and where to seek care are influenced by his/her beliefs and perceptions of types and severity of signs and symptoms as well as by financial considerations. Assessing, the perceptions, beliefs and practice in childhood illness management of the mothers/care givers, therefore provides evidence for further intervention such as preparing educational messages based on existing beliefs.

This study therefore aims to determine the factors affecting health seeking behavior (HSB) of mothers/ care givers when their children under the age of 5 years are suffering from common childhood illnesses such as diarrhea, fever, cough, and difficulty of breathing (DOB). Therefore, this study enables one to understand how to influence mothers/care givers behavior by a rational policy in order to promote child health. And the result from the study would be used to design effective intervention strategies for deaths caused by childhood illness in study community and communities with similar culture.

2. OBJECTIVES

2.1. General objective

- To assess mothers'/care givers health care seeking behavior for childhood illnesses in rural Ensaro District, North Shoa Zone, Amhara Region, Ethiopia 2014.

2.2. Specific objectives

- To describe the magnitude of mothers/care givers health care seeking behavior for child hood illness.
- To assess determinant factors of mothers/care givers health care seeking behavior for childhood illness

3. Methods and Materials

3.1. Study Area:

The study was conducted in Ensaro Woreda, North Shoa Zone, Amhara regional state of Ethiopia. The capital town of the Woreda is Lemi, located 130 Km away from Addis Ababa. North Shoa Zone has 24 Woredas; Ensaro Woreda is one of the 24 Woredas found in the Zone, with a population size of 61,750(male 31,664 & female 30,086) and under five years account 8,596(male 4294& female 4302). The Woreda has four health center, 13 health stations, and 2 pharmacy and rural drug venders. The main ethnic groups are Amhara. The major religion is Orthodox. The official language is Amharic.

"The Amhara Region is located in the northwestern part of Ethiopia between 9°20' and 14°20' North latitude and 36° 20' and 40° 20' East longitude." Its land area is estimates at about 170000 square kilometers. Amhara borders Tigray Region in the North, Afar in the East, Oromiya in the South, Benishangul-Gumuz in the Southwest and the country of Sudan in the west. Amhara is divided into 11 zones, and 140 Woredas. There are about 3429 kebeles (the smallest administrative units). "Decision-making power has recently been decentralized to Woredas and thus the Woredas are responsible for all development activities in their areas." The 11 administrative zones are: North Gonder, South Gonder, West Gojjam, East Gojjam, Awie, Wag Hemra, North Wollo, South Wollo, Oromia special zone, North Shoa and Bahir Dar City special zone(45)

3.2. Study Design:

The study was utilized a community based cross-sectional study design that employed both quantitative and qualitative data collection methods to assess mothers/care givers health care seeking behavior for childhood illness in a rural Ensaro district. Structured questionnaire was used to collect quantitative data and focus group discussion was conducted for key informants to collect qualitative data.

3.3. Study Period

The study was conducted from April 11/2014 to May 10/2014

3.4. Source population

The source population was all mothers/care givers living in Ensaro District who have at least one under five year child.

3.5. Study population

Study population was sampled mothers who have at least one under five year child with or without illnesses and resident in Ensaro District at least for six month prior to the day of the study.

Study population for qualitative: Key informants like mothers/care givers with at least one under five year child, community leader, religion leader, traditional healer, volunteer health service provider and health professional.

3.6. Eligibility criteria

3.6.1 Inclusion criteria

Mothers/caregivers who have at least one under-five year child and living in Ensaro district for at least six months prior to the day of the study period.

3.6.2 Exclusion criteria

Mothers / caretakers were unable to participate in this study due to illness and other causes.

3.7 Sample Size determination

The sample size was determined by using single population proportion formula. The following assumptions were made, marginal error (W) that was tolerated in either sides of the true proportion to be 5%, and using 95% confidence level and adding 10% to compensate for non responses and the proportion of health care seeking behaviour of mother /care givers for childhood illness (P), 72.7% from research done at Bahirdar (28).

$$n0 = \frac{\left(Z\frac{\alpha}{2}\right)^2 P(1-P)}{d^2} = n0 = \frac{(1.96)^2 0.727(1-0.727)}{0.05^2} = 304.9 = 305$$

Using correction formula since population is less than 10,000 in the area (6345 target populations mean that mothers/care givers with under five children)

$$n = \frac{n_0}{\left(1 + \frac{n_0}{N}\right)}$$

Where n_0=305

N= target population =6345

Then the sample size n=291

Then design effect 2 is used because multistage sampling to minimize sampling error

= (291x2) = 582

→By assuming non-response rate 10%, the total sample size will be:

Sample size = (582 x10%) + 582=641

3.8 Sampling technique:

3.8.1 Quantitative part:

By using multi-stage sampling method the 6 rural kebeles (from 10 rural kebeles) and one town kebele (from 3 urban kebeles) was selected using simple random sampling methods (lottery method) from 13 kebeles in the Woreda. The sampling was considered probability proportion of population size in urban and rural. Systematic sampling technique

was employed for household selection. The first household was selected randomly from the first household list 1st to 6th household list by using lottery method then the next household was selected every 6th households by using the household record used by health extension worker as reference until total sample needed in the kebele was achieved. Within each selected household only one mother with index child was selected. Whenever there was more than one mother with under five children in a household only one was selected using lottery method.

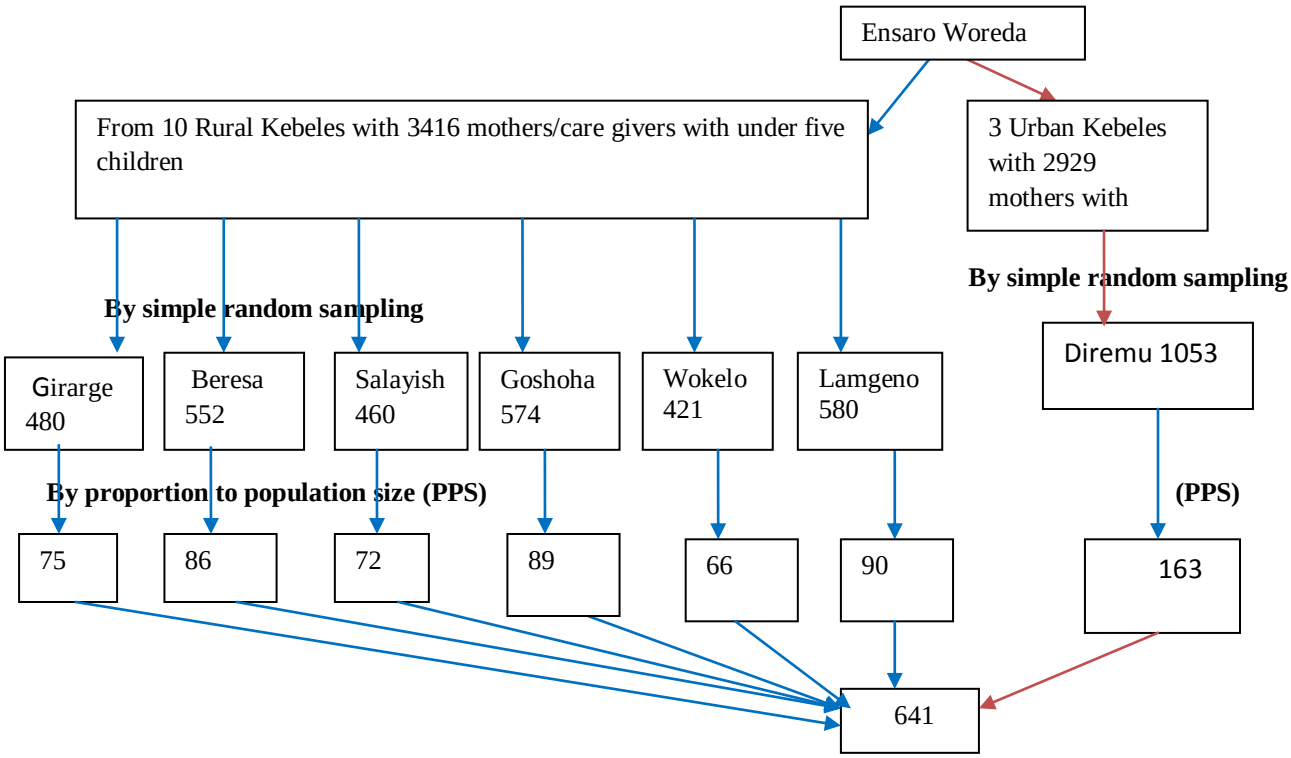

Figure 1: Schematic presentation of sampling procedure

3.8.2 Qualitative part:

Key informants like mothers/care givers with at least one under five year child, community leader, religion leader, traditional healer, volunteer health service provider and health professional was involved. A total of 52 women and men were selected using purposive sampling for six focus groups, each comprising around 8-10 participants.

3.9 Data Collection Technique and Tools

The data was collected through face to face interview using structured questionnaires which was adopted from different reviewed literature (19, 26, 28, 30). The questionnaire was prepared in English and translated from English to Amharic and re-translated back to English to check the consistency. Before the actual data collection, the tool was pretested on 5% of the sample size to check the reliability. The pre-tested data was not including in the main data. Fourteen diploma holder Nurses and/or Midwives were involved in data collection. Three degree holder nurse and/or midwife were selected as supervisor.

During data collection when the house was find locked next time the house was revisited three times then if locked the next house was interviewed.

For qualitative, the data collection was employed with FGD exploration through probing questions prepared in Amharic language. Tape recorder was employed to the area where FGD was conducted and field note and observation also was undertaken. Mothers/care givers with at least one under five year child, Community leader, religion leader, traditional healer, volunteer health service provider and health professional were selected from each selected Kebeles.

FGDs guide questions containing the current situation of child health problems, factors affecting provision of the service and ways to promote health care utilization in the area were used to collect qualitative data through FGD on health seeking behavior of mothers/care givers on childhood illness. Participants were left to discuss each question actively with as little interference as possible from the principal investigator who was acting as a moderator, the principal investigator assisted by two degree nurses; one assistant was responsible for the tape recording while the other was taking field notes.

Focus group discussions (FGDs) were conducted in five kebeles of Ensaro district and in one health center; the Kebeles and the health center were purposely selected from a list of 13 Kebeles where the participants live and the health center was selected based on patient flow. The Kebeles were selected based on geographical directions from the district. FGDs' participants were recruited one week before the meeting for discussion, through the Kebeles health extension worker, health center head and Kebele leader who were informed of the criteria for selection of the FGDs participants.

The discussions lasted between 60 and 90 minutes. At the end, participants were given an opportunity to ask general questions on various health issues, and the principal investigator and one degree nurse assistant who was a clinician responded accordingly.

3.10 Variables

3.10.1 Dependant variable

Health care seeking behavior of mothers/care givers for childhood illness.

3.10.2 Independent variables:

Socio-Demographic characteristics: - age of the mother/care giver, sex of the child, marital status, family size, educational status, economic status (income), distance of the health facility, place of resident and occupation.

3.11 Operational definitions

Appropriate Healthcare-seeking Practice: Care sought from skilled health care provider in government health facilities and private hospitals/clinic

Caregiver: This is a woman who is responsible of taking care of a child; she can be the relative of the child or the mother

Disease: any deviation from normal function of any part, organ or system of the body diagnosed and confirmed by physician

Health care: an institution which provides promotive, preventive and curative service that can be owned by public, private and non-governmental organization

Household: a group of related people or family living together

Illness: the subjective response of the patient and of those around him to his being unwell

Inappropriate Healthcare-seeking Practice: Other types of care which are not according to the definition of appropriate healthcare-seeking practice such as purchasing medicine from a pharmacy or shops without prescription, home remedies and traditional healers. In the current study it also includes those who take no action for the perceived illness

Kebele: The smallest administrative unit in an urban and rural area

Modern treatment – the treatment schedules given in health institutions

Self-medication: where ill-health is first recognized and all the therapeutic options initiated and utilized with or without consulting medical practitioners

Sickness: the social connotation and socially acceptable role of an ill person

Traditional medicine: spiritual, religious, and experience based knowledge and practice applied to treat patient with apparent illness and sickness. Like treatment given by traditional healers, Wogesha, herbalists and magicians (holy water, pray).

Under-five Children: Children from 0-59 months

Healthcare-seeking Practice: Any activity undertaken by individuals who perceive themselves or their children to have a health problem for the purpose of finding a remedy. This is based on the recognition of symptoms, which are interpreted by individuals who then proceed to address the problems.

3.12 Data Quality Assurance

Both interviewers and supervisors were trained on methods of data collection. Questionnaire was checked on daily basis for completeness during data collection was cleaned and coded before data entry. Data analysis was started by sorting and performing quality control checkup on field. Data was checked in the field to ensure that all the information was properly collected and recorded. Before and during data processing the information was checked for completeness. The questionnaire was pre-tested before data collection.

3.13 Data processing and Analysis:

For quantitative data processing, master sheet or template was prepared and the data was entered, categorized, coded, and summarized using EPI 3.5.3 and transformed to SPSS version 20.00 in the computer for further analysis.

Frequency and proportion was computed for description of study population in relation to socio demographic and other relevant variable (age, marital status,). Both bivariate and multivariate logistic regression analysis was done to see the association of each categories of each variable with the outcome variable. Significance was checked at 95 % CI in binary logistic regression. Variables with $p<0.05$ in binary logistic regression analysis was entered in multivariate logistic regression analysis to control for potential confounding variables. Finally, statistical significance was disclosed at $P<0.05$ at 95% CI to identify determinant factors of health care seeking behaviour of mothers/care givers for childhood illness. The results were presented in the form of tables, figures, and summary statistics.

The qualitative data that was obtained from FGD was auto taped, transcribed, translated and coded. The response was transcribed to Amharic and translated to English and the main response was categorized to its theme. The main responses from the respondents were reported using narrative and mentioned in direct quotation. Inductive content analysis was used to process of analysis and systematically coding segment by segment based on the request questions. Finally the narrative qualitative information and the observation was organized and integrated according to emerging themes and concepts that were answered the research questions and the results were triangulated with quantitative finding.

3.14 Ethical consideration

Ethical clearance was obtained from ethical review committee of Addis Ababa University, department of nursing and midwifery and this was communicated to the Amhara regional state Health Bureau, the North Shoa Zone Health office, and the Woreda Health Office. Prior to data collection, verbal consent were obtained from the study participants. All information that was obtaining from the individual was treated confidential.

3.15 Data dissemination

The result of the study will be communicated to relevant bodies including Ensaro Woreda Health office, North Shoa Zone Health Office, Amhara Regional State Health Bureau, Federal Ministry of Health and Addis Ababa University. Furthermore, all attempts will be made to present the findings to scientific conference and attempt will be made to publish the finding in different reputable journal.

4. Result

In this study 641 mothers/caregivers were interviewed, resulting in an overall response rate of 100%.
A total of 52 women and men were participated in the six focus groups, each comprising around 8-10 participants. The majority were women, reflecting the fact that women are the ones who commonly accompany sick children to health facility within the study setting.

4.1 Socio-demographic characteristics of mothers/care givers and the selected youngest child

Almost all of study participants 640 (99.8%) were from the Amhara ethnic groups. 191(29.8 %) were in the age group of 25-29 years with mean age of 28.9 years (SD±7) and 639 (99.7%) the respondents were Orthodox Christians, regarding to marital status 575 (89.7%) were married and 478(74.6%) of the respondents were lived in rural part of Ensaro Woreda. More than half of the respondent were farmers 331 (51.6%), followed by House wives 181 (28.2%) and Governmental workers 54 (8.4%).

Approximately 177(27.6%) were earn 300-600 birr per month with mean of 761(SD±705). The literacy status showed that 301 (47%) were illiterate and 38 (5.9 %) diploma and above. The median household size were 4 and 457 (71.3%) were had two to five families in the household. Most of the index child 272(42.4%) were 12-24 months and 82(12.8%) were 0-11months with 327(51%) were female children, 133(20.7%) house hold had previous child death history (**table 4.1**)

Table 4.1: Socio-demographic characteristics of mothers/care- givers and the selected youngest child, Ensaro Woreda, Ethiopia, 2014

Variables	Frequency		Percentile
Age of the mother in year (N=641)	15-19	15	2.3
	20-24	158	24.6
	25-29	191	29.8
	30-34	136	21.2
	35+	141	22.0
Age of the child in month (N=641)	0-11months	82	12.8
	12-24 months	272	42.4
	25-36 months	129	20.1
	37-59months	158	24.6
Sex of the child (N=641)	Male	314	49
	Female	327	51
Educational status of the mother /care givers (N=641)	Illiterate	301	47
	Read and write only	162	25.3
	Primary education	79	12.3
	Secondary education	41	6.4
	Certificate	20	3.1
	Diploma ad above	38	5.9
Occupation of the mother (N=641)	Farmer	331	51.6
	House wife	181	28.2
	Governmental worker	54	8.4
	Merchant	45	7
	Daily worker	28	4.4
	Student	2	.3
Place of resident (N=641)	Urban	163	25.4
	Rural	478	74.6
Religion (N=641)	Orthodox	639	99.7
	Protestant	2	.3
Ethnicity (N=641)	Amhara	640	99.8
	Tigire	1	.2
Marital status (N=641)	Married	575	89.7
	Single	22	3.4
	married but lived in separate place	22	3.4
	Widowed	22	3.4
Monthly income of the family (N=641)	<300	172	26.8
	300-600	177	27.6
	601-1000	174	27.1
	>1000	118	18.4
Family size (N=641)	2-5	457	71.3
	>5	184	28.7
Death of under five (N=641)	Yes	133	20.7
	No	508	79.3

4.2. Sickness profile of the children and type of measures taken for sickness

641 mothers/care givers were asked about the health status of the selected under five children in the 4 weeks proceeding to this study. The overall 4 weeks prevalence of childhood illness that had one or more symptoms of disease was 212 (33.1%). According to the mothers /care givers the causes of childhood illness were curse from God 86(40.6%), microorganism 49(23.1%), evil eyes 26 (12.3%), teething 25 (11.8%), eating contaminated food and water 23 (10.8%) and shortage of nutrient 12 (5.7%) (**Table 4.2**), this finding can also be substantiating by the FGD discussant as follow

"Dirty, shortage of food, yefetari kuta, parasites, and insects like mosquito were most common cause of Child hood illness." From 34 years FGD participants (Informant # FGD2)

Health care seeking were sought by 192(90.6%) of mothers /caregivers for their sick children. Majority of the mothers/caregivers seek care from governmental health care unit 127(59.9%), followed by traditional treatment 35(16.5%), private health care unit 23(10.8), no action were taken 20 (9.4%) and give home remedies 16 (7.5%). The finding was supported by focus group discussant as follow

From FGD the 32 years old mothers said that "Basic needs is very important to my child who is ill, what I normally give include porage, milk, vegetable and fruits, soft drink, breastfeeding and juice like rani)" - (Informant #FGD 1).

"We usually go health center, but sometimes they don't have libratory equipment and drug. They tell you to go and do it at a private clinic and come back with results and drug. We find it difficult so we decided to go directly to the traditional healer …"

Most of the mothers/care givers classified child hood illnesses as moderate were 104(49.1%) and more than half of mothers/care givers identified severity of childhood illness when child refused to eat or breast feed were 121(57.1%). Most of the respondents 148 (69.8%) the importance of identifying childhood illness were to decide on management.

Table 4.2: Childhood Illness and Care Seeking Behavior of Mothers/ Care givers in Ensaro District 2014

Variable		Frequency	Percentile	Remark
child with sickness in the last four weeks (N=641)	Yes	212	33.1	
	No	429	66.9	
causes of childhood illness (N=212)	Curse from God	86	40.6	
	Microorganism	49	23.1	
	Evil eyes	26	12.3	
	Teething	25	11.8	
	Eating contaminated food and water	23	10.8	
	Shortage of nutrient	12	5.7	
From the most recent symptoms you Observed, have you received any treatment for your child? (N=212)	Yes	192	90.6	
	No	20	9.4	
action taken (N=212)	Took to governmental health care unit	127	59.9	
	Traditional treatment	35	16.5	
	Took to Private health care unit	23	10.8	
	No action was taken	20	9.4	
	Give home remedies	16	7.5	
According to your perception, how sever was your child illness (N=212)	Severe	77	36.3	
	Moderate	104	49.1	
	Mild	31	14.6	
the method used to identified severity of childhood illness (N=212)	By combined symptoms of the disease (vomiting)	63	29.7	
	If the child refused to eat or breast feed	121	57.1	
	If the illness continue for long time	48	22.6	
The use of identifying Childhood illness? (N=212)	To Decide on management	148	69.8	
	To identify the cause	70	33	

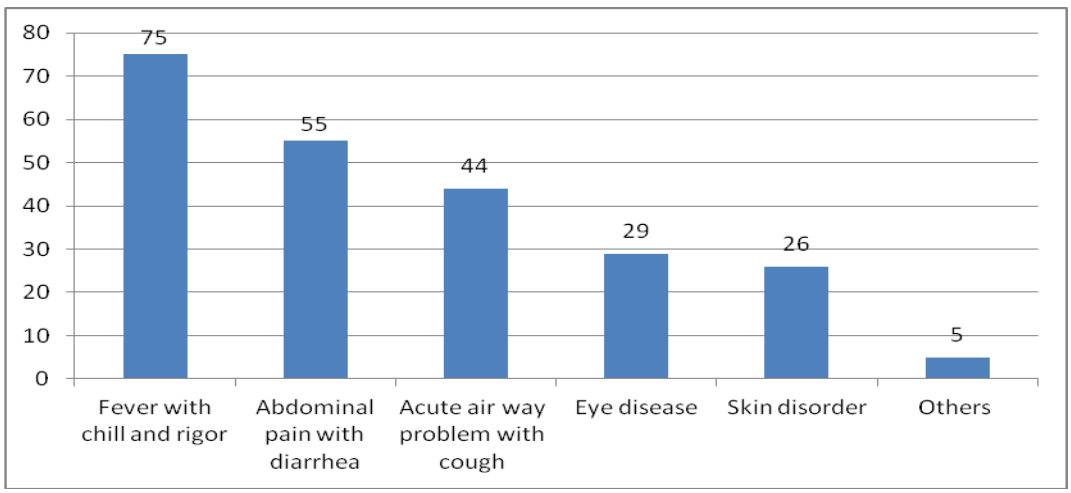

Figure 4.1: symptoms reported by the mothers/care givers in the preceding four weeks of the study in Ensaro district 2014

A total of 212 sick children, the mothers /care givers reported different kinds of symptoms in the preceding four weeks of the study. Among these, fever with chill and rigor accounted 75(35.4%), followed by abdominal pain with diarrhea and without diarrhea 55(25.9%), acute air way problem with cough 44(20.8%), eye disease 29 (13.7%), skin disease 26(12.3%), and others 5 (2.4%) (**Fig 4.1)**. The qualitative study of this finding implied that

The major health problems identified by FGD participants were," Kulalite, Malaria, Birde, diarrhoea, Azurite, Tikusat, Gunfan, Ikek, Kurtemat, likift and evil eye/Buda"

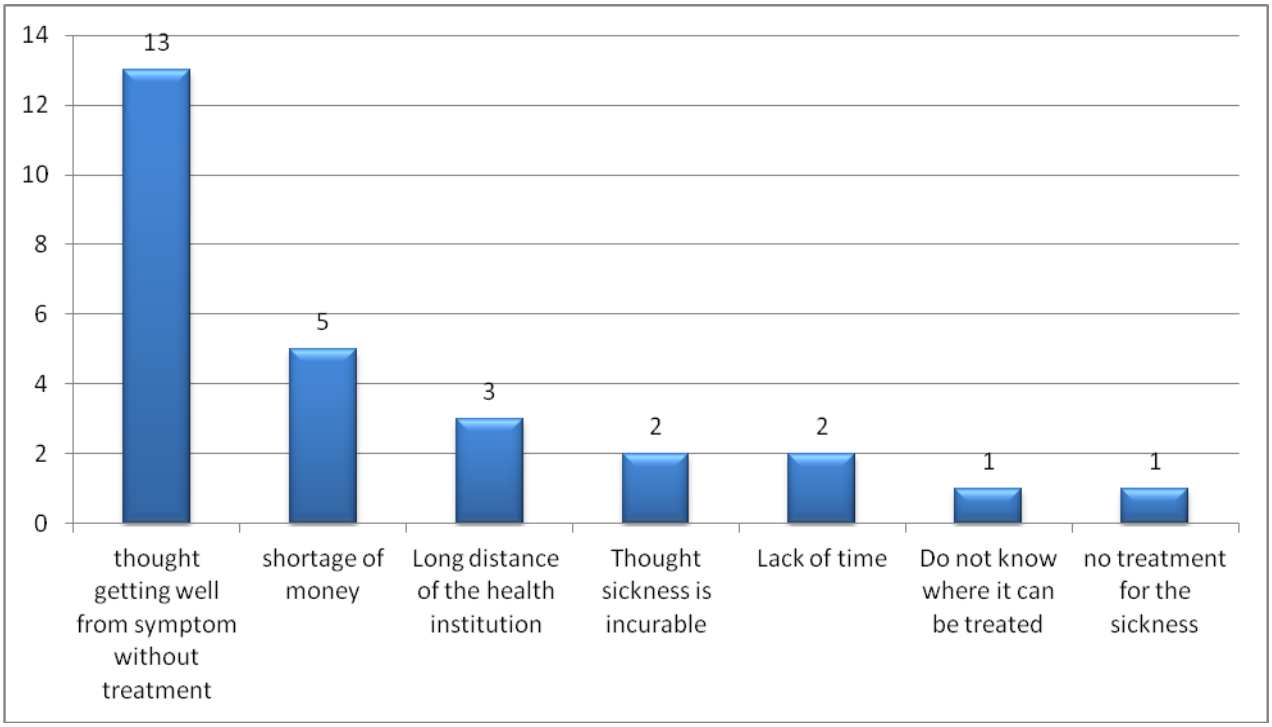

Figure 4.2: the reasons why mothers/ care givers not take action for their childhood illness in Ensaro district 2014

The reasons of the respondents who were not seek treatment for recently observed child hood illness 13 (65%) were thought getting well from symptom without treatment, 5(25%) were due to shortage of money, 3(15%) were due to Long distance of the health institution, 2(10%) were thought sickness is incurable, 2(10%) were lack of time, 1(5%)do not know where it can be treated and 1(5%) no treatment for the sickness (**Fig 4.2**) the finding were supported by focus group discussant as follow …

One of the daily worker from FGD "I don't have anybody beyond my child to be bother so unless scarcity of money nothing will be barrier for me" – (Informant #FGD 3)

"I am working in governmental institution, and to most of my time, I find it hard to balance between work and family time especially during the illness of my child." (Informant # FGD 2)

One of the farmer FGD respondents "when you approach the nurse and tell her my child's condition is not good, she tells you do not teach me my job. Then you remain without doing anything, but wait her while observing your child until when she feels like helping your child by herself/himself." – (Informant #FGD 4)

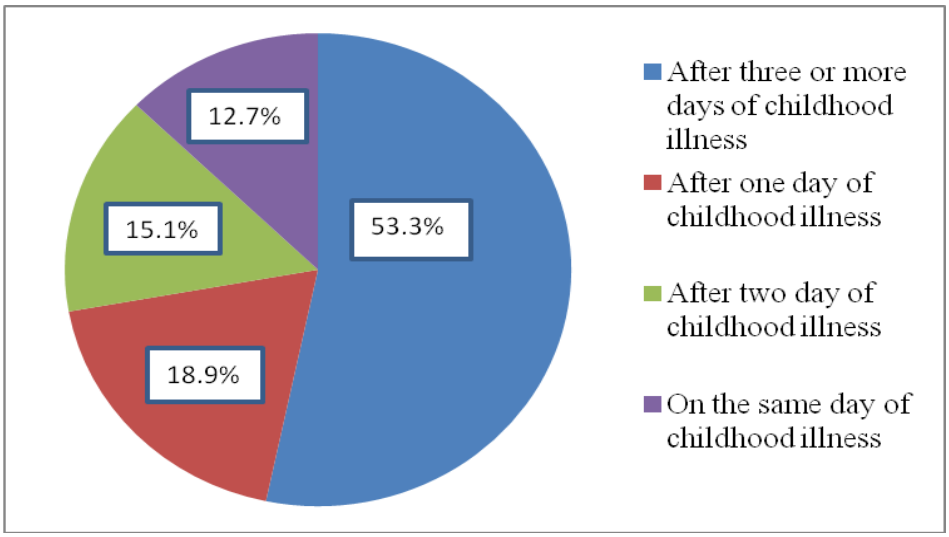

Figure 4.3: Time the mothers / care givers seek health care for their sick child in Ensaro district 2014

For the duration of illness before treatment majority of the mothers/care givers sought health care 113(53.3%) after three or more days of childhood illness, followed by 40(18.9%) after one day of childhood illness, 32(15.1%) after two day of childhood illness and 27(12.7%) on the same day of childhood illness (**fig 4.3**). The finding supported by qualitative data as follow

A 3 years experienced nurse from the FGD said that "most of mothers do not visit health care facilities unless they are convinced that their child is seriously ill or they do have an appointed for immunization. He also reported that they do not have the habit of visiting health care services for checkup and growth monitoring." – (Informant #FGD 6)

28 year old diploma holder mothers said about "her infant's was serious illness. The child had cough and increased temperature so I took him to the clinic and was given paracitamol syrup which did not help then no change after two days I also took him to a private institution who also gave paracitamol syrup which did nothing and I took him to a second private institution they also gave him a lot of medication (paracitamol syrup, multivitamins, and cotrimoxazole syrup) but that did not help. Then I took him to hospital and given paracitamol syrup and body lotion but was never admitted. Two weeks later we went back to the clinic where first examined. They were told me, that he was being allergic to soap and he is still going to develop panic and die. They were giving me a referral to go to the hospital, in hospital they admitted him and then tested his fluids because the doctor was suspecting meningitis. The baby stayed in hospital between two and three weeks and then he suddenly developed a rash on his whole body. The nurses wanted to change the IV site from his arm to his head but I refused and ended up taking him back home with me. We stayed home for one week and then the panic started again so I took him to another hospital, then he was admitted in pediatric ward and died after five day." – (Informant #FGD 4).

4.3. Mother's/care givers perception on causes of childhood illness, signs and symptoms of illness, severities of illness, transmission and treatment of illness

Almost half of the respondents 323(50.4%) believed that they treat child hood illness by traditional healer, this were due to 122(37.7%) they do not charge to much, 80(24.7) there is no long waiting time, 51(15.8%) because they are near and 34(10.5%) treatment is effective (**table 3**). Those finding triangulated with the qualitative responses as follow

"I have worked in health institution for about 10 years. We have had mothers wanting to take the child from here, wanting us to disconnect IV fluid; she wants to take the child away because the traditional healer told them that the child is obsessed by the dead people. So the dead people are sitting on them. Their feelings are with them. So they perform a sort of a ritual procedure to cleanse them. Then the parent doesn't want to stay in the health center believing that you are delaying the child. So they demand us to remove the child from the IV fluid so that they will go to the healer to perform the ceremony, and then come back with the child. Usually you try and convince the mother and say that the baby might die before she reaches the main gate. So, usually we try and calm them down. Sometimes, you find, you can convince them. Some do listen to us, some just don't." (Health Center Nurse Informant's # FDG6)

The mothers/care givers believed that the treatment they got from traditional healer, the majority 122(37.7%) herbal medication, followed by 110(34.1%) massage, 96(29.6%) spiritual care, 28(8.6%) tattooing/cauterization and 10(3.1%) advice. (**Table 4.3**).some of the FGD support this finding

One religion leader said that *"traditional healers are widely available, accessible, and desirable to families" (Informant's # FGD 2)*

"Mothers/care givers whose infants became sick at home took their infants to a traditional healer during the Child's final illness. For these children, healers prescribed various treatments including infant inhalation/ingestion prepared from different herbs, special holly water for drinking or bathing. Caregivers who consulted traditional healers said they associated the child's Symptoms with pathogenic agents or events occurring outside the body such as evil spirits."(Informant's # FGD3)

one of the 30 years male participant said about the public health center worker, *"they didn't give me any help, even paracetamol, because my child had fever, I requested for paracetamol but they told me to go and buy because no paracitamol. But I decided to go without delay towards traditional healer as I was afraid because when I was late and I might lose my child" (Informant's # FGD3)*

From 641 respondents the majority 491 (76.6%) believed that early health seeking is important for their childhood illness. Different types of perceived causes for childhood illness identified by mothers/care givers on the study were evil-eye 202(31.5%), curse from God179 (27.9%), eating contaminated food and water 175(27.3%), microorganism 165(25.7%), teething 139(21.7%) and shortage of nutrient 92 (14.4%) **(Table 4.3)**. This finding triangulated by FGD as follows…

One of the religion leader said that *"mothers/care givers should put a sharp iron object near the bed side of the newborn or an iron object should be tied around the neck of newborn, because it prevent from evil, and also at the evening 12:00 o'clock a fire "chisachis" should be burned at the bed side.(Informant's # FGD5)*

One of the mother said that "the child should be kept indoor because taking out in the sun light within 21 days expose the child to evil and cold air, even no light should pass the area where he/she sleep, nobody touches, kiss the mother and baby until the mother is out off Aras Bet" (Informant's # FGD4)

To identify childhood illness mothers /care givers used different method 359 (56%) when the child refused to eat or breast feed, 265 (41.3%) when there was combined symptoms of the disease on the child and 96(15%) when the illness continue for long time **(Table4.3).** This finding were supported by FGD response as follow

"We believe in cultural things, something like 'Wogesha, holly water, herbalist ". So when the child is sick, the child is crying a lot and, you know, you are giving the baby food, and the baby doesn't want to eat and he just keeps on crying and you do everything that you can and then you say, 'Oh this child has something else.' then mothers/care givers seek health care for those conditions" (Informant's # FGD3)

More than half of the mothers/care givers 342(53.4%) perceived that identifying severity of childhood illness were important to identify the cause of childhood illness. 465(72.5%) mothers/care givers believed that Community or institution health workers were the most successful persons for treating childhood illness, so 468(73%) mothers/care givers were perceived that treating childhood illness from governmental health care unit had importance. Most of the mothers/ care givers 465(72.5%) were decided about their childhood illness treatment with family member especially husband. **(Table 4.3)**

Table 4.3: Mother's perception on causes of childhood illness, signs and symptoms of illness, severities of illness, transmission and treatment of childhood illness in Ensaro district 2014

Variables		Frequency	Percentile	Remark
If your child become sick did you treat your child by traditional healers(N=641)	Yes	323	50.4	
	No	318	49.6	
The reason why they need traditional healer(N=323)	They do not charge to much	122	37.7	
	There is no long waiting time	80	24.7	
	Because, they are near	51	15.8	
	Treatment is effective	34	10.5	
	They are respectful	26	8	
	Because, family recommended it	22	6.8	
	don't get cure from medical care	17	5.2	
	Maintain confidentiality	5	1.5	
	Maintain privacy	4	1.2	
What type of medication have you sought from traditional healer? (N=323)	Herbal medication	122	37.7	
	Massage	110	34.1	
	Spiritual care	96	29.6	
	Tattooing/cauterization	28	8.6	
	Advice	10	3.1	
Do you believe that early health seeking is important for your Childhood illness? (N=641)	Yes	491	76.6	
	No	150	23.4	
Is there childhood illness that can't be treated by modern medicine? (N=641)	Yes	438	68.3	
	No	203	31.7	
For the sickness what did you think is the possible cause? (N=438)	Evil eye	202	31.5	
	Curse from God	179	27.9	
	Eating contaminated food and water	175	27.3	
	Microorganism	165	25.7	
	Teething	139	21.7	
	Shortage of nutrient	92	14.4	
How do you think severity of childhood illness is identified (N=641)	If the child refused to eat or breast feed	359	56	
	By combined symptoms of the disease (vomiting)	265	41.3	
	If the illness continue for long time	96	15	
What do you think the use of identifying types of Childhood illness? (N=641)	To identify the cause	342	53.4	
	To Decide on management	324	50.5	
Which person do you think is the most successful in the treating childhood illness (N=641)	Community or institution health worker	465	72.5	
	Private drug shop owner	124	19.3	
	Herbalist	50	7.8	
	Magician	46	7.2	
	Wogesha	25	3.9	
If your child becomes sick from where do you seek care for your child illness? (N=641)	Government health care unit	468	73	
	Private health care unit	123	19.2	
	Home treatment	88	13.7	
	Traditional treatment	75	11.7	
	Local healers	51	8	
If your child becomes ill with whom you decide about your child treatment? (N=641)	Household identified(husband)	465	72.5	
	Health professional	100	15.6	
	Have previous experience	73	11.4	
	Neighbors identified	60	9.4	
	Religious leader	16	2.5	

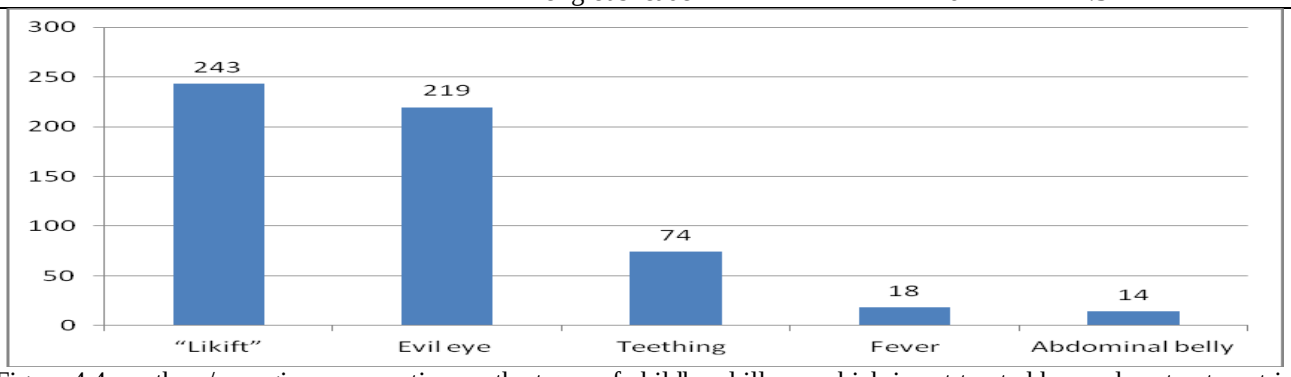

Figure 4.4: mothers/care givers perception on the types of childhood illness which is not treated by modern treatment in Ensaro district 2014

Most of the respondents 438(68.3%) believed that there were childhood illness that could not be treated by modern medicine. They reported that, "likift" 243(55.5%), evil eye 219 (50%), teething 74 (16.9%), fever 18 (4.1%) and abdominal belly 14(3.2%) (**Fig 4.4**). This quantitative finding supported by qualitative responses as follow

One of the farmer respondents said that *"If the child has evil eye injection is fatal so am not taking my child to health facility unless disproved by traditional healer" (Informant's # FGD2).*

The members of the FGD said that *"for most of the illness episodes home remedies were tried before going to health institutions and they even reported that for certain illnesses such as evil eye ,likift, Setan beshita, is believed to be an illness that can only be treated by traditional healers."(Informant's # FGD1)*

4.4. Bivariate Analysis and Multivariate Analysis

4.4.1. Factors associated with healthcare-seeking practice for childhood illness

The results from the unadjusted logistic regression analysis of factors associated with health care-seeking practices for under-five childhood illness.

The odds of 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 (OR 2.413; [95%C.I 1.384, 4.209], OR 1.888; [95%C.I 1.139, 3.130], respectively. Regarding to mothers or caregivers 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 (OR 2.970, 2.882, 22.708, 10.786, 9.2((95%C.I 1.836, 4.803) (1.521, 5.463) (3.079, 167.489) (1.424, 81.684) (1.57, 18.42) respectively. According to the occupation of the mother governmental health worker were more likely seek health care than house wife (OR: 16.514 (95% C.I (2.218-122.977).

Household who had 2-5 family size were more likely seek health care than household who had more than 5 family size (OR: 1.625 (95%CI (1.102, 2.395) and also household lived in urban more likely seek health care than rural residence (OR: 9.513(95%CI 4.352, 20.797).

Caregivers who were earn more than1000 birr per month more likely seek health care compared to who earn less than 300 birr per month. (OR 2.123 (95%C.I 1.188, 3.795) **(table 4.4)**

The results from the adjusted logistic regression analysis of factors associated with health care-seeking practices for under-five childhood illness after controlling for other factors, three factors had significant importance when it comes to appropriate healthcare-seeking practices in the Ensaro district.

The odds of seeking healthcare for childhood illness more likely higher when the mother age is 20-24 years and 25-29 years than mothers/care givers age more than 35 years (OR 2.128; (95%C.I (1.096-4.128), OR 1.857; (95%C.I (1.017-3.390)) respectively. Regarding to mothers/caregivers' education, those who had read and write, secondary education and diploma and above were more likely to seek health care than those who were illiterate (OR 2.095, 14.850, 8.03 ((95%C.I 1.247-3.519) (1.944-113.449) (1.2-2.51) respectively.

Place of residence also appeared as an important factor that influenced healthcare-seeking, with residents urban more likely seek health care than rural residence (OR: 6.748 (95%CI (2.971-15.326) **(table 4.4)**

Table 4.4: Unadjusted and adjusted odds ratio from logistic regression analysis of factors influencing healthcare-seeking behavior for childhood illness, Ensaro District 2014

Variables		Health seeking behavior		Crude OR **(95%C.I)**	**AOR(95%C.I)**
		No (%)	Yes (%)		
Educational status	Illiterate	109(72.7)	192(39.1)	**1.00**	
	read and write	26(17.3)	136(27.7)	**2.970(1.836, 4.803)** ✦	**2.095(1.247-3.519)** ★
	Primary	13(8.7)	66(13.4)	**2.882(1.521, 5.463)** ✦	1.887(.937-3.801)
	Secondary	1(0.7)	40(8.1)	**22.708(3.079, 167.489)** ✦	**14.850(1.944-113.449)** ★
	Certificate	1(0.7)	19(3.9)	**10.786(1.424, 81.684)** ✦	6.855(.586-80.232)
	diploma and above	0(0.0)	38(7.7)	**9.2(1.57,18.42)** ✦	**8.03(1.2-2.51)** ★
Occupation of the mother	House wife's	43(28.7)	138(28.1)	**1.00**	
	Governmental work	1(0.7)	53(10.8)	**16.514(2.218, 122.977)** ✦	.947(.076-11.819)
	Merchant	4(2.7)	41(8.4)	**3.194(1.082, 9.426)** ✦	1.164(.345-3.933)
	Farmer	101(67.3)	230(46.8)	.710(.469, 1.074)	.812(.514-1.282)
	Daily worker	1(0.7)	27(5.5)	**8.413(1.110, 63.743)** ✦	3.556(.430-29.383)
	Student	0(0)	2(.4)	.85(.65,1.23)	1.23(.53-5.8)
Age of the mother	15-19 years	1(0.7)	14(2.9)	6.351**(**.810, 49.816**)**	5.070(.568, 45.250)
	20-24years	25(16.7)	133(27.1)	**2.413(1.384, 4.209)** ✦	**2.128(1.096-4.128)** ★
	25-29years	37(24.7)	154(31.4)	**1.888(1.139, 3.130)** ✦	**1.857(1.017-3.390)** ★
	30-34years	43(28.7)	93(18.9)	.981**(**.591, 1.630**)**	.875(.498-1.537)
	35+years	44(29.3)	97(19.8)	**1.00**	
Place of residence	Urban	7(4.7%)	156(31.8)	**9.513(4.352, 20.797)** ✦	**6.748(2.971-15.326)** ★
	Rural	143(95.3)	335(68.2)	**1.00**	
Monthly Income	<300	52(34.7)	120(24.4)	**1.00**	
	300-600	45(30.0)	132(26.9)	1.271**(**.795, 2.033)	1.210(.720-2.034)
	601-1000	33(22.0)	141(28.7)	**1.852(1.124, 3.051)** ✦	1.582(.907-2.757)
	>1000	20(13.3)	98(20.0)	**2.123(1.188, 3.795)** ✦	1.379(.715-2.659)
Family size	2-5	95(63.3)	362(73.7)	**1.625(1.102, 2.395)** ✦	.791(479-1.305)
	>5	55(36.7)	129(26.3)	**1.00**	

✦ *Statistically significant for bivariate analysis*

★ *Statistically significant for multivariate analysis*

The results from the unadjusted logistic regression analysis of factors influencing mother's perception on causes of childhood illness, signs and symptoms of illness, severities of illness, transmission and treatment of childhood illness
The odds of mothers/care givers who observed fever with chill and rigor for their children less likely need seeking healthcare than who observe other symptoms. (OR: 402, 95%C.I (.193-.841) This finding supported by FGD responses as follow

During FGD one of the key informants said that, *"it was suggested that some families may not provide any care if caregivers identified some signs of illness as normal and expected infant conditions. (Informant's # FGD3)*

A head nurse in health center said *"such thinking with respect to cough, weight loss and malnutrition is common: 'They believe it is not an illness that needs to be taken to health care unit care." (Informant's # FGD6)*

Child refused to eat or breast feed more likely seek health care than who had other sign and symptoms (OR: 2.460, 95%C.I (1.298-4.665). regarding to the duration of illness the longer the period of illness the higher the likelihood of seeking appropriate health care and the results are statistically significant(OR: 2.844, 95%C.I(1.159, 6.979). Household who believed that effective treatment were found from Herbalist less likely seek appropriate health care than who believed on health institution worker (OR: .511 95%C.I (.278- .940)

Household who were lived less than 5 kilometer from the health facility more likely seek health care than household who were lived more than 10 kilometer from the health facility(OR: 5.656, 95%C.I (3.140-10.191) **(table 4.5)**

The results from the adjusted logistic regression analysis of factors influencing mother's perception on causes of childhood illness, signs and symptoms of illness, severities of illness, transmission and treatment of childhood illness after controlling for other factors, two factors had significant importance when it comes to appropriate healthcare-seeking practices in the Ensaro district.

Mothers/care givers who believed effective treatment is found from private health institution worker more likely seek health care than who seek from other source (OR: 4.060 (95%CI (1.159-14.222). This finding supported by FGD responses as follow

45 years father said "usually I don't take my child the health post around us, because it was Saturday and the health post wasn't operating", "If your child gets sick at night, there is nowhere to run to until morning. If you have money then you will look for private clinic on the same night. If you can't afford then your child might die while you are watching for the morning." (Informant's # FGD2)

54 years old man said that "in some health facilities there is shortage of adequate diagnostic facilities and drugs, as a result of which appropriate treatment cannot be provided to the patients, who would then resort to tradition treatment." (Informant's # FGD4)

Household who were lived less than 5 kilometer from the health facility more likely seek health care than household who were lived more than 10 kilometer from the health facility(OR: 12.420 95%C.I (3.249-47.472) **(table 4.5)**

Table 4.5: Unadjusted and adjusted OR from logistic regression analysis of factors influencing mother's perception on causes, signs and symptoms of childhood illness, severities of illness, transmission and treatment of childhood illness in Ensaro district 2014

Variable			Health seeking behavior		Crude OR **(95%C.I)**	**AOR((95%C.I))**
			No (%)	Yes (%)		
Observed sign and symptoms	Fever with chill and rigor	Yes	11(21.2)	64(40.0)	.402(.193, .841) ✦	2.050(.905-4.644)
		No	41(78.8)	96(60.0)	**1.00**	
Day of recognition	On the same day		11(21.2)	16(10.0)	**1.00**	
	After one day		12(23.1)	28(17.5)	1.604(.577, 4.462)	1.195(.374-3.820)
	After two day		7(13.5)	25(15.6)	2.455(.788, 7.651)	1.915(.550-6.670)
	After three or more days		22(42.3)	91(56.9)	**2.844 (1.159, 6.979)** ✦	2.674(.927-7.712)
How the severity of your child illness is identified	By combined symptoms	Yes	20(13.3)	43(8.8)	.637(.358, 1.133)	.806(.254-2.559)
		No	32(21.3)	117(23.8)	**1.00**	
	child refused to eat or breast feed	Yes	21(40.4)	100(62.5)	2.460(1.298, 4.665✦	1.713(.514-5.706)
		No	31(59.6)	60(37.5)	**1.00**	
	If the illness continue for long time	Yes	17(32.7)	31(19.4	.495(.246, .996) ✦	.512(.139-1.879)
		No	35(67.3)	129(80.6)	**1.00**	
Successful person for treating childhood illness	Herbalist	Yes	18(12.0)	32(6.5)	**.511(.278, .940)** ✦	.426(.117, 1.555)
		No	132(88.0)	459(93.5)	**1.00**	
	Private drug shop owner	Yes	19(12.7)	105(21.4)	**1.876(1.107, 3.178)** ✦	**4.060(1.159, 14.222)** ★
		No	131(87.3)	386(78.6)	**1.00**	
Distance of the health facility	<5km		17(11.3)	194(39.5)	5.656(3.140, 10.191) ✦	**12.420(3.249-47.472)** ★
	5-10km		76(50.7)	182(37.1)	1.187(.784, 1.798)	1.867(.852 -4.092)
	>10km		57(38.0)	115(23.4)	**1.00**	

✦ *Statistically significant for bivariate analysis*
★ *Statistically significant for multivariate analysis*

5. Discussion

The objective of this study was to explore the healthcare-seeking practices of mothers/caregivers of under-five children with childhood illness, and to find out the socio-demographic factors and mother's perception on causes of childhood illness, signs and symptoms of illness, severities of illness, transmission and treatment of illness associated with healthcare-seeking practices of the mothers/caregivers, in Ensaro District.

From this study 641 mothers/care givers were asked about the health status of the selected under five children in the 4 weeks proceeding to this study. The overall 4 weeks prevalence of childhood illness that had one or more symptoms of disease was 212 (33.1%) when it compared with the study done at Bahir Dar showed that the overall two weeks prevalence of childhood illness that had one or more symptoms of disease was 110 (26.5%)(28). The difference is due to short recall time for childhood illness by Bahir Dar study.

In this study from a total of 212 sick children, the mother /care givers reported different kinds of symptoms in the preceding four weeks. Among these, fever with chill and rigor accounted 75(35.4%), followed by abdominal pain with diarrhea and without diarrhea 55(25.9%), acute air way problem with cough 44(20.8%), eye disease 29 (13.7%), skin disease 26(12.3%), and others 5 (2.4%) when this study compared with study done at Mekelle the most prevalent symptom were cough, diarrhea, fever, eye problems, skin infection and tonsillitis. Cough was the most common reported symptoms by 106 (18.9%) mothers (26). The difference might be due to geographical and seasonal difference.

The study showed that 127(59.9%) mothers/ care givers were sought medical care from governmental health care unit ,35(16.5%) from Traditional healer and 23(10.8%) from Private health care unit, similar finding from study done at Mekelle showed that 88% (n=81) of the mothers who reported that they were sought modern medical care in the incidence of their childldren sickness reported where as only 22% (n=11) mothers were sought private health facility(26). This might be high cost needed to be paid to access private medical facilities.

This idea is supported by the qualitative finding of this study, One of the house wife from the FDG said that *"One day my child faced severe illness then we went to private hospital then we payed unpredicted payment for "examination and treatment we costs one thousand and we pay two hundred for the card so we preferred traditional healer with low cost."*

Results from this study showed that 23.4% of mothers/ caregivers perceived that not seek healthcare when their children become sick, This finding is almost similar with a study conducted in Bahir Dar which showed that 27.3% mothers/caregivers not sought treatment for their childhood illness either from governmental or private health care facilities (28). This might be due to the ethnicity similarity in both studies, and the new health policy of the country, the health extension program, the health promoter and voluntary health care provider have been played a great role in promotion and health education provision in the society.

On this study mothers/care givers perceived different causes for childhood illness evil-eye 202(31.5%), curse from God179 (27.9%), eating contaminated food and water 175(27.3%), microorganism 165(25.7%), teething 139(21.7%) and shortage of nutrient 92 (14.4%) research done at Dera showed almost the same result with the present study (19). It might be due to cultural and socio demographic similarity.

This study showed that about 9.4 % mothers/care givers were not taking action for their childhood illness, the major reasons why treatment was not sought from health facility 13 (65%) were due to thought getting well from symptom without treatment, 5(25%) were shortage of money and 3(15%) were Long distance of the health institution, other research done at Bahir Dar the main reasons for not seeking care from health facilities by mothers'/caregivers' were, 26.7% lack of money (28) and also the research done at Derra showed that mothers' main reasons for not seeking care from health facilities were lack of money were 36%, and far distance from health facility were 27.7% (19). The difference might be most of this study respondents were illiterate, low income and had believed on traditional treatment.

In this study 323 (50.4%) had believed on traditional healer, other Study done on Mecha Oromo lived in Weliso showed that 70% of illnesses treated traditionally by using home remedies, traditional healers, holy waters and others (20).the difference might be due to the introduction of health service extension program in the district. The qualitative part of this study triangulated the quantitative study,

Some group of people said that "health professional are mostly trained and prepared for provision of health service so they are better". Still some tried to explain that "modern medicines have better supply of equipment and medication" and this would be a good reason to be seek health towards healthcare unit", this idea was support by research done at Mekele (26).

The finding from the logistic regression analysis showed that mothers/care givers who live in urban area were more likely to seek care from the health facilities than the rural mothers (adjusted OR: 6.748 (95%CI (2.971-15.326) the finding consistent with other studies done at Dera showed that mothers who live in urban area were more likely to seek care from the health facilities than the others with the odds ratio of (adjusted OR=5.58 95% CI, 2.05-15.2) (19, 26). This might be due to urban population has more access to information and health facility than rural population.

The finding from the logistic regression analysis showed that mothers/care givers who had educational level read and write ,secondary education and diploma and above were more likely to seek appropriate health care seeking behavior for childhood illnesses to health facilities than mothers/ care givers who were illiterate (adjusted OR 2.095, 14.850, 8.03 ((95%C.I 1.247-3.519) (1.944-113.449) (1.2-2.51) respectively, similar to reports from other studies done in Yemen showed that mothers /care givers who were completed secondary education and higher more likely seek appropriate health than others (adjusted OR=5.85, 95% CI, 2.34–14.61)(43). This might be the world concern on education and health with Millennium Development Goal.

The findings of this thesis showed that younger caregivers are more likely to seek appropriate health care than older ones (adjusted OR=2.128, 95% CI 1.096-4.128) other research done in Ethiopia had the same finding that indicate modern treatment seeking behavior was more likely among mothers aged <19 years and 20-29 years when compared to mothers of age 40-49years, (adjusted OR=3.78 (95% CI=1.14-12.51) and (adjusted OR=2.73 (95% CI=1.37-5.45)) respectively (44). But study done at Kenya oppose this study finding the result suggest that older caregivers are more

likely to seek appropriate care than younger ones 40-49 (OR: 1.231) compared to 20-29 (30). The difference might be due to cultural and socio-demographic difference between the two countries.

Regarded to the distance from health facility participants who were located near a health care facility were more likely to visit the health facility at the time of illness than those who lived far. (adjusted OR=12.420, 95% CI, 3.249-47.472) other study done at Kenya showed that participants who were located near a health care facility were more likely to visit the health facility at the time of illness than those who lived far(30). This might be due to both countries are developing countries.

The multivariate analysis result showed mothers/care givers who were preferred private drug shop owner more likely higher to seek appropriate health care than mothers who preferred traditional healer, other study done in Nigeria had the same finding with this study(18). This might be people had believed on private health care institution.

6. Strength and Limitation of the Study

6.1 Strength of the study

- ★ Large sample size
- ★ 100% response rate
- ★ It employed community based cross-sectional study which triangulated with the qualitative method

6.2 Limitations of the study

- ❖ This study used a long recall period for four weeks, thus susceptible to recall bias.
- ❖ This study consider the distance of HF as one independent factors but lack of scientific distance measurement only using the district document
- ❖ The study utilized perception and oral report of an individual's for sickness report

7. Conclusion

The objective of this study was to identify factors associated with mothers' health seeking behaviour to control their childhood illness. The study showed that from 641 respondents the majority 491 (76.6%) believed that early health seeking is important for their childhood illness. Most common symptoms reported in the area were fever with chill and rigor, abdominal pain with diarrhea and without diarrhea, acute air way problem with cough, eye disease and skin disease. For the reported symptom of childhood illness, most mothers took their children to health facility after three or more days of childhood illness. The critical predictors of healthcare-seeking identified using multivariate analysis are; place of residence, educational status of the mothers/care givers, age of the mothers /care givers, distance of the health facility and private drug shop owner.

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