ADDIS ABABA UNIVERSITY

COLLEGE OF HEALTH SCIENCE

SCHOOL OF ALLIED HEALTH SCIENCES

DEPARTMENT OF NURSING AND MIDWIFERY

ASSESSMENT OF HEALTH SEEKING BEHAVIOR AND ASSOCIATED FACTORS FOR GENERAL DANGER SIGNS AMONG MOTHERS OF UNDER FIVE CHILDREN IN BISHOFTU TOWN, EAST SHOA ZONE, OROMIYA, ETHIOPIA, 2016.

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A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCE, SCHOOL OF ALLIED HEALTH SCIENCES, DEPARTMENT OF NURSING AND MIDWIFERY FOR PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF SCIENCE IN PEDIATRICS AND CHILD HEALTH NURSING.

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ADDIS ABABA, ETHIOPIA

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List of Abbreviations and Acronym

AAU – Addis Ababa University

BSC – Bachelor of Science

CI – Confidence Interval

DNM- Department of Nursing and Midwifery

EDHS – Ethiopian Demographic and Health Survey

HSB – Health Seeking Behavior

IMNCI – Integrated management of newborn and childhood illness

MDG – Millennium Developmental Goals

PI – Principal Investigator

SPSS - Statistical Package for Social Science

UNICEF – United Nations International Children's Emergency Fund

WHO – World Health Organization

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Abstract

Background: Adequate recognition of danger signs is an important parenting tool in preventing the child from preventable morbidities and mortalities. Many child deaths are attributed to delays in seeking care, a timely care seeking practice has a great importance in areas with limited health access. The world health organization estimates that seeking appropriate and on time care by care givers could reduce child death by 20%.

Objective: The objective of the study was to assess health seeking behavior and associated factors for general danger signs among mothers of under-five children in Bishoftu town, East Shoa Zone, Oromiya.

Methods: A community based cross sectional study was conducted from March – April 2016. A total of 422 mothers were included in the study. The collected data were entered into computer using Epi data version 3.5 and analyzed using SPSS version 23. Logistic regression was fitted to assess possible association and the strength of association was measured using odds ratio with 95% CI.

Results: The study revealed that health seeking behavior was exhibited among 200 (49%**)** of mothers who took their child to hospital/health facility immediately without any home intervention. Educational level of the mother (OR=5.6, 95% CI: 1.6-20.1), monthly income (OR=9.0, 95% CI: 3.8-21.9), previous child illness (OR=6.3, 95% CI: 3.2-12.3) and mothers' knowledge of general danger signs (OR=2.6, 95% CI: 1.3-4.5) were found to have statistically significant association with health seeking behavior.

Conclusion: This study showed that almost half of the mothers sought appropriate health care from both government and private health institutions. Although this number seemed appreciable, given the positive phase of change in health sector of the country and the immediate need to seek care for general danger signs, the number is still not sufficient. Hence, continuous education of mothers on recognition of danger signs in children and the need to seek appropriate and immediate medical care in health facilities should be implemented.

Key words: General danger signs, Health seeking behavior,Bishoftu town, Mothers of the under-five child

Chapter 1: Background

1.1 Introduction

An important step toward increasing child survival and reducing the mortality is an early detection of illnesses and immediate care seeking practices of care givers (1). In most developing countries, child deaths occur at home, signifying that most families does not recognize general danger signs and/or the majority of children are not taken to health facilities during illness (2). A sick child will show subtle signs of illness and usually the condition may aggravate quickly.Restlessness and difficulty feeding may be the only signs present at first but there may also be other additional signs designated as general danger signs (1).

WHO recognized general dangers signs are: -i) Not feeding since birth or stopped feeding; ii) Convulsion; iii) Respiratory rate of 60 or more (fast breathing); iv) severe chest in-drawing (difficulty in breathing); v) Temperature of $\geq$ 37.5 degree centigrade (fever); vi) Temperature $\leq$ 35.5 degree centigrade (hypothermia); vii) Only moves when stimulated or not even when stimulated (weakness or lethargy); viii) Yellow soles (sign of jaundice); ix) Umbilicus redness or draining pus, skin boils, or eyes draining pus (sign of local infection) (1, 3, 4).Different studies show that proper identification of these danger signs and the overall implementation of the IMNCI program was closely related with timely treatment seeking from proper providers by care takers (5).

Trends in Ethiopian society so far recognizes Mother as care takers and mostly responsible for their Childs' health and wellbeing. So their timely recognition of danger signs and care seeking behavior plays an important role in reducing deaths and complications due to ill health. Health seeking behavior(HSB) can be understood as a function driven by motivation and ability of individuals to look for medical treatment where the availability of health facilities and other sources of healthcare are limited (6). Emphasis needs to be given to HSB because in most developing countries risk behaviors such as delays in seeking care takes a major part in most of child deaths (7).

1.2 Statement of the problem

Although considerable progress has been made towards achieving Millennium Development Goal (MDG) 4, which calls for reducing the under-five mortality rate by two-thirds between 1990 and 2015, the current rate of reduction is still insufficient to reach the target in the specified year (8). Every year an estimated 4 million babies die in the first 4 weeks of life and, Almost all (99%) deaths arise in low-income and middle-income countries. Among which the highest numbers are in south-central Asian countries and the highest rates are generally in sub-Saharan Africa (9). In these regions, especially the sub- Saharan, preventable health conditions with access to affordable and simple interventions account for more than half of child deaths (2).

Because many child deaths are attributed to delays in seeking care, a timely care seeking practice has a great importance in areas with limited health access. The world health organization estimates that seeking appropriate and on time care by care givers could reduce child death by 20%. Adequate recognition of danger signs is still an important parenting tool in preventing the childfrom preventable morbidities and mortalities (8).

Global literatures indicate that factors affecting heath seeking behavior could be categorized as socio demographic status, economic conditions, cultural beliefs, women's autonomy, physical and financial accessibility, disease pattern, and health service issues. But in developing countries, cultural beliefs and practices were the most prevalent (10).

In the sub-Saharan Africa, in addition to the factors mentioned so far low accessibility due to distance to the referral health facility, preference of traditional healer for illness associated with spirits, and lack of knowledge to identify signs and symptoms of the illness related to the neonates takes the leading role (11).

So far several countries have introduced different tools to help identify danger signs and reduce child mortality in health programs. The World Health Organization (WHO) developed Integrated Management of Newborn and Childhood Illness (IMNCI) guideline to help focus on assessment of general danger signs in sick children at health care centers during examinations (1).

Here in Ethiopia, although significant works has been done in the implementation of IMNCI, children are still suffering from morbidities and mortalities related with danger signs. This is mainly attributed to parent's care seeking practices. Only few studies were conducted in Ethiopia with regard to care seeking behavior of mothers for their children (12). Hence further studies need to be conducted to assess mothers' HSB and influencing factors.

1.3 Significance of the Study

In Ethiopia, even though there are great achievements in decreasing infant and child mortality in the past decade, the effort is still not enough to achieve the MDG by 2015 as specified by the policy makers. Generally, reducing child morbidity and mortality requires immediate caregiver's recognition of suggestive danger signs in the child and visiting the nearby health facility. But according to EDHS, the current trends indicate that health care utilization remains low with only 29.87% of formal health care seeking practices in the country. Hence further investigation and additional information would be helpful to curve the problem from the grass root level.

Therefore knowing about care seeking behavior and associated factors of general danger signs among mothers is important to aid the planning of action to reduce and control the mortality and morbidity that relate to general danger signs. In addition the findings could help health sector officials in planning to work towards improving families' care seeking behavior which in turn could contribute significantly to reducing child mortality. Furthermore the study findings could be helpful for other researchers as stepping stone for further investigations in the area. This study will supply baseline information so as to improve health facility utilization practices in the country in the long run.

Chapter 2: Literature Review

2.1. Mortality

There is significant decline in preventable child deaths over the past quarter of a century. Many childhood deaths are easily preventable with simple and cost effective as well as high impact interventions that address the need of women and newborns with an emphasis on care at delivery (8).

Raising number of births, especially in sub-Saharan Africa, accounted for 1.4 million more deaths in the last two decades (13). Nevertheless, according to studies on mortality, in several low-income countries, including all regions in sub Saharan Africa, vigorous measurements in children younger than 5 years indicate high pace mortality decrement (14). According to global burden of disease study in 2013, raising income per person accounted for 0.9 million fewer deaths and maternal education accounted for 2.2 million fewer deaths attributing to the decline (13).

According to systematic review in sub-Saharan countries it is estimated that 41–72% of child deaths can be avoided through adequate coverage of current health care interventions (15).Up and coming studies has shown that children born in rural regions, poor households, or to a mother denied basic education, are at increased risk of dying before the age of five (16). Among the recommended key activities of WHO's and UNICEF's Global Action Plan for the Control of childhood morbidity and mortality, is the importance of caregivers' ability to recognize and seek appropriate care for their children (17).

There are several studies examining the determinants of childhood mortality as it is a major health priority in sub- Saharan Africa, but only few studies have explored general danger signs in children which potentially cause morbidity (18). In programs aiming at reduction in childhood mortality, Caregivers' timely recognition of general danger signs and appropriate referrals serves as a backbone (19). Because most children are still dying in the developing countries without reaching healthcare facilities regardless of various reported health seeking interventions (20), improving identification of young children who require referral for severe illness is of major public-health importance (3).

2.2. Care seeking behavior

The World Health Organization estimates that seeking prompt and appropriate care by care givers could reduce child deaths by 20% (7).Although there is an overall progress in the health sector, in most developing countries, large number of children are still dying without ever reaching a health facility and due to delays in seeking care from appropriate providers (12). Studies in the Latin American countries, Brazil and Guatemala, states that, only one-third of sick children (i.e. children with any symptom) visited health care providers, while two-third of participants sought other forms of help for their child's illness (21, 22).

Findings on care seeking practices in south Asia on three countries, the Bangladesh, Nepal and Pakistan, also indicate that health care utilization for general danger signs were very poor in all three countries and families chose traditional healers and homeopathic doctors (Bangladesh), home remedies and faith healers (Nepal), local religious leaders and traditional healers (Pakistan) when they recognize their child's illness (23). In Northern India alone, findings indicate that 23% (46/200) of respondents sought health care or administered medicines for childhood illness. Consulting traditional healer took around twenty per cent (19.6%; 9/46) while the remainder were treated with home remedies (24).

In sub-Saharan Africa, a study conducted in Ghana, reveals a result of only 29.1% of neonates with danger signs received postnatal care in the first two days, and 52.4% at two weeks of life indicating delays in seeking care (18). In Nigeria, the behavior is somehow appreciable in which, approximately half (125 (47.7%)) of the 263 Nigerian mothers, took the child to the hospital immediately without any home intervention. Five (1.9%) of these mothers did nothing while the remaining 133 (50.5%) took other remedies instead of seeking care from health facilities (4). In Ethiopia, according to the 2011 Ethiopian demographic and health survey, access and utilization of health care facilities remains low with only 849 (29.87%) among a total of 2,842 caregivers, seeking formal health care facilities in most parts of the country (25, 26).

2.3. Determinants of care seeking behavior

2.3.1. Geography

A systematic review on the recognition of danger signs and care seeking behavior in developing countries, shows that, Six studies from six developing countries disclosed, caregivers in urban areas were more likely to seek care than those in rural locations (17), and eight studies showed that rates of care seeking were inversely related to the distance to the closest health facility (17). In addition, two studies showed that caregivers were more likely to seek traditional care if they were further away from a health facility (17).

In Guatemala, geographic factors and accessibility of services are also often strong determinants of a mothers' use of the formal health sector (27). According to the study findings,remote location, poor public transportation, infrastructure, cost of travel, and frequent impassability of roads due to inclement weather make distances to the closest public health center or public hospital major obstacles (27). Same result was evident in Nicaragua with (25.8%) of participants stating distance to the facilities was a barrier (28). Similar findings were exhibited in a cohort study in Bangladesh, signifying that long distance has to be travelled or poor road condition causing travelling to be difficult or time consuming in seeking care practices (29).

An assessment of mother's health seeking behavior during child illness in a rural western Kenya community reveals that of the mothers whose children had symptoms of disease, almost a third (29.2%) indicated that they would have sought professional medical services if the health facility were near. For most of the households, the nearest government health facility was about 4 kilometers away, suggesting that participants who werelocated near a health care facility were more likely to visit the healthfacility at the time of illness than those who lived far (30).

In Ethiopia, a study finding from Derra District, Oromia, indicate that among the study participants 23(27.7%) of mothers respond far distance from health facility was an obstacle for seeking care(12).

2.3.2. Perceived Severity of Illness

Six studies from developing countries found that the more severe caregivers perceived the child's illness to be, the more likely they were to seek care (17). In Yemen, Perceiving illnesses as severe was five times more likely to be associated with medical care seeking as compared to not severe (31). A questionnaire survey in western Nepal also indicates, (69.8%) of respondents reported that the reason for seeking care was perceived severity of illness and number of symptoms present at time of illness (32).

In the sub-Saharan countries similar results were encountered. A study from Nigerian teaching hospitals reveals that, children were taken to health institution when the mothers noticed a sudden change in their baby's condition (20). According to the study, the changes reported by the respondents include, Child stops playing39 (26%), change in child's health condition 99 (66%), While 12 (8%) reported when the condition of the child is deteriorating (20).

A descriptive community based cross sectional study in Ethiopia shows one of the reasons for not seeking treatment from health care facilities as reported by mothers/caregivers was, the presenting illness was not serious (53.3%) (6).

2.3.3. Socio demographic characteristics and Cost of Health Care

In findings from a cross-sectional study in Granada, Nicaragua, where utilization of health care was low, indicates socio demographic characteristics such as :- mean age of the mothers being 24.3 (±5.7) years, mean number and age of children 2.5 (±1.9) and 12.1 (±6.7) respectively, The mean duration of the mothers' school education being 5.8 (±3.6) years, The median monthly household income being 800 Cordobas, which is equivalent to 58.0 USDand 10.1% of the mothers had no school education where the majority were housewives (89.3%). All these indicators had an impact on the care seeking behavior of the mothers (28).

In southern Asian countries such as Bangladesh, Nepal and Pakistan socio demographic characteristics such as: - Family size and parity, educational status and occupation of the head of the family, age, gender and marital status are associated with health seeking behavior (10, 32, 33). In several Indian villages, west Bengal, Gujarat and Lucknow (northern India) assessments on care seeking indicate that, high cost of health care was strong determinant of the behavior (34-36).

In Africa, knowledge and care seeking was not significantly associated with maternal socio-demographic variables in South-East Nigeria (4), while in a cross-sectional study in Ghana, maternal age less than 20 years and maternal education level lower than secondary school significantly predicted the behavior (18).

In studies from Derra (Oromia) and Bahir Dar (Amhara) Ethiopia, indicate cost for health as a strong predictor with 30 (36%) and 26.7% of response respectively (6, 12).

2.3.4. Cultural Beliefs and Practices

Traditional practices cannot be neglected in considering the achievement of better child care and survival in developing countries, this is because most babies may be affected by traditional practices in their early life (37). Cultural beliefs and practices often lead to self-care, home remedies and consultation with traditional healers in rural communities (10). Traditional healing systems and biomedical treatment are used as complementary services in most societies in the world. The decision to go to traditional healers is affected by many factors, such as, traditional beliefs (for example, the influence of evil spirits and harmful effects of allopathic treatments), lack of understanding of the problem, distance to clinics or facilities, costs of treatment and perceived lack of quality of health services (23).

Findings from India compliment this result. In a rural community of Darjeeling district, West Bengal indicates that, 71.2% of the mothers respond, fixed and firm cultural beliefs were contributory factors for their seeking care together with ignorance and lack of awareness (34). In other Asian villages also, in Bangladesh, Nepal and Pakistan, mothers almost always sought care initially from homeopathic doctors, traditional healers, dais, or religious leaders for their child illness (23).

In Africa although most traditional practices are under taken, there are only few study findings documented. In rural western Kenyan community, only 24.5% of mothers reported that they consulted traditional healer and used traditional medicine (30).

2.3.5. Gender Difference

In Developing Countries, a Systematic Review of Seven studies examined whether the gender of the child influenced care seeking or not. Four studies in Kenya, Ethiopia, Pakistan and Sri Lanka found no significant difference in care seeking rates between male and female children while two studies carried out in Indonesia and Burkina Faso however, found that caregivers were more likely to seek care for boys than girls (17).

In Rural Uttar Pradesh, India, a study on Gender Differences in Perception and Care-seeking for Illness of Newborns indicates that, average expenditure for healthcare during the neonatal period was nearly four-fold higher in households with males (Rs 243.3±537.2) compared to females (Rs 65.7±100.7) (p=0.07). Households with female newborns used cheaper public care providers whereas those with males preferred to use private qualified providers perceived to deliver more satisfactory care (38).

2.3.6. Awareness of General Danger Sign

Early identification of general danger signs by caregivers is crucial for prompt and appropriate care seeking. In two Indian community an assessment on knowledge of care givers on danger signs was made, and the result from Peri-Urban Wardha indicate, out of 72 mothers, 29 (40.3%), 16(22.2%) and 10(13.9%) identified difficulty in breathing, poor sucking and lethargy/unconsciousness as general danger signs respectively (19). According to this study, only 7(9.7%) and 2 (2.8%) identified convulsion and hypothermia as general danger signs respectively(19),

A study on rural community from Sarojininagar Block, Uttar Pradesh revealed, more than half of the caregivers recognized fever, irritability, weakness, abdominal distension/vomiting, slow breathing and diarrhea as danger signs in children (24). According to the study, Seventy-nine (39.5%) of the caregivers had seen a sick child in the family in the past 2 years (24). Although the results may seem fair, there is need for raising awareness building in these communities.

In Africa, a study from Enugu state, South-East Nigeria shows, knowledge of more than three of the nine WHO recognized danger sign was poor (0.0-30.3%) where majority of the mothers had knowledge of only one (i.e. fever) WHO recognized danger sign (95.2%) (4). In the East Mamprusi District of the Northern Region of Ghana, a study, which sought to explore women knowledge of general danger signs, revealed that many of the women have limited knowledge regarding general danger signs (39).

A Community Survey from Southwestern Rural Uganda indicates that overall respondents had a poor knowledge of key danger signs: 58.2% could identify one and 14.8% could identify two danger signs (1). In Ethiopia, a similar community based study from north western part shows, mothers who had knowledge of three or more general danger signs (good knowledge) were found to be only 18.2% signifying intervention modalities that focus on increasing level of parental education are pinpoints (40).

2.4. Conceptual Framework

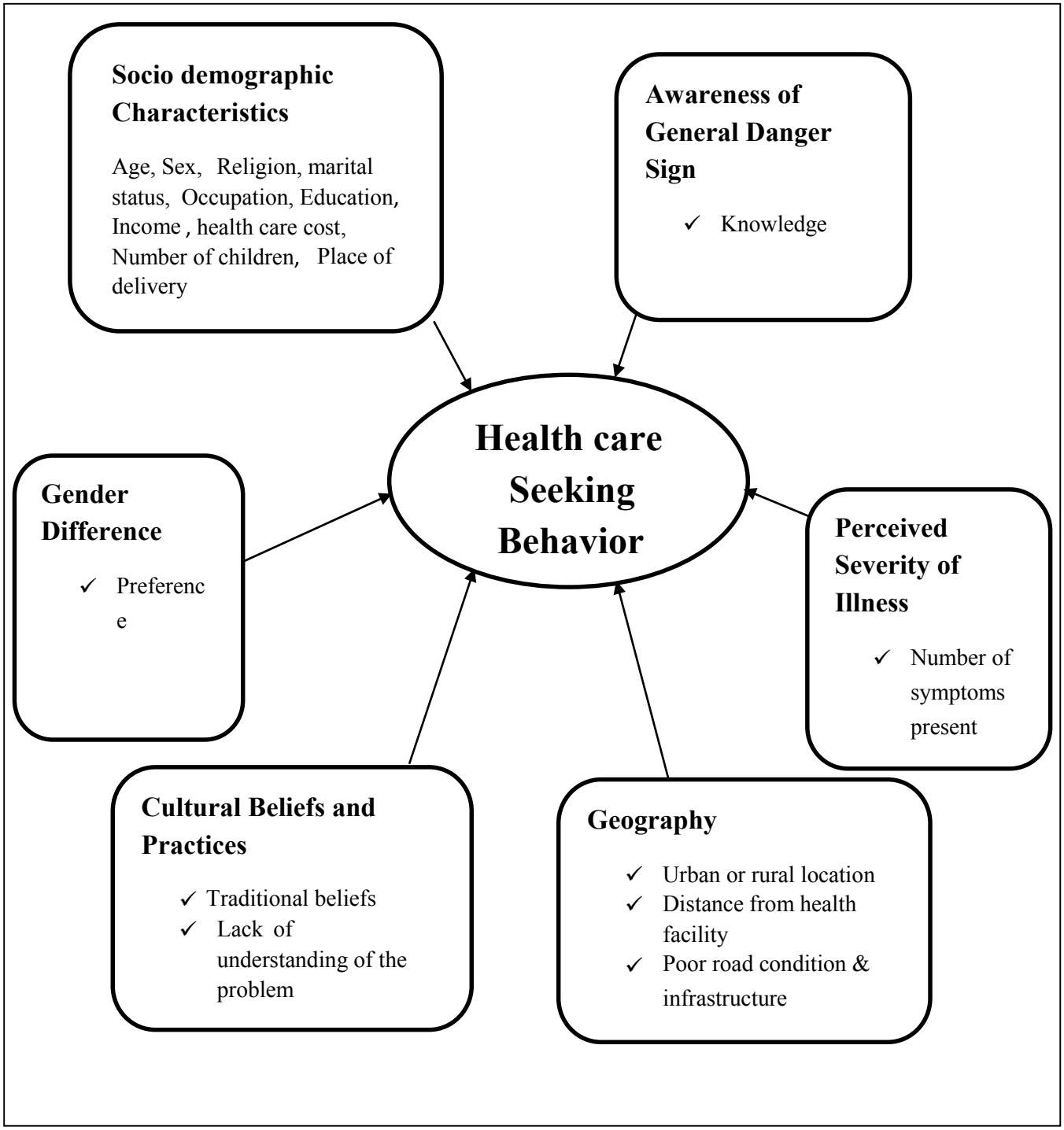

Figure 1- Conceptual framework adopted from literature review

Chapter 3: Objective

3.1 General Objective

To assess health seeking behavior and associated factors for general danger signs among mothers of under-five children in Bishoftu town, East Shoa Zone, Oromiya, from March – April 2016.

3.2 Specific Objective

- To assess health seeking behavior for general danger signs among mothers of under-five children.
- To identify associated factors of health seeking behavior among mothers of under-five children.

Chapter 4: Methods and Materials

4.1. Study area

Bishoftu is one of the towns and separate woredas of Ethiopia which is found in the east shoa zone of Oromiya region with an elevation of 1,920 meters above sea level. The town is located 47.9k.ms southeast of the capital city Addis Ababa and has a total of 09 kebeles. According to 2015's Bishoftu town censes report, currently, there is a total population of 176,743 of both sexes. Of this, male population is 90,846 and the remaining 85,897 are female. There are approximately a total of 6,133 pregnant women and 29,039 under five children of which 5,691 are under one years of age in the town. There are a total of four public health institutions of which one is a hospital and the remaining three are health centers. (Source: Bishoftu City Health Administration Office (personal contact)).

4.2. Study design

A community based descriptive cross sectional study design was employed.

4.3. Source population

All mothers of under-five children in Bishoftu town, East shoa zone, Oromiya.

4.4. Study population

Mothers of under-five children who were randomly selected and living in households of selected kebeles in Bishoftu town, East shoa zone, Oromiya.

4.5. Inclusion and exclusion criteria

4.5.1. Inclusion criteria

All volunteer mothers who had under-five children in the household and reside for more than six months in the selected kebeles were included in the study.

4.5.2. Exclusion criteria

Those mothers who were not at home up to three times when data collectors were visiting and single fathers in the selected households were excluded from the study.

4.6. Sample size determination

The required sample size was determined by using single population proportion formula. The prevalence of HSB in the study area is unknown. Although similar studies were available in other countries, the setting of the countries was not comparable to that of ours. Hence 50% prevalence (P=0.5) was taken. Considering 10% non-response rate, the total sample size was 422.

$$n = \frac{Z^2\, p\,(1-p)}{d^2}$$

$1.96(1.96)*0.5\,(1-0.5)/\,(0.05)^2 = 384.16 + 10\% = 422.$

4.7. Sampling procedure

Probability sampling technique was employed to select the respondents of the study. From the 09 kebeles found in Bishoftu town, three kebeles were selected by using lottery method. The calculated sample size was allocated to each kebele by proportion to size allocation technique based on the under-five population in each selected kebele. Then by using list of households with mothers of under five children in each kebele as a sampling frame, households in each kebele were selected using systematic random sampling technique where every 27th household with under five mothers was selected and interviewed. The immediately next household was used when the mother of the household was not at home up to three times when data collectors were visiting and when the mother refused to participate in the study.

Proportional allocation = $\frac{\text{Total population of each kebele}}{\text{Total population for all selected kebeles}} \times \text{total sample size}$

For kebele 01= $\frac{5174}{11492} \times 422 = 190$, kebele 02 = 84, kebele 05 = 148

'K' interval = $\frac{\text{total population for all selected kebeles}}{\text{Total sample size}}$

$K = \frac{11492}{422} = 27.23$

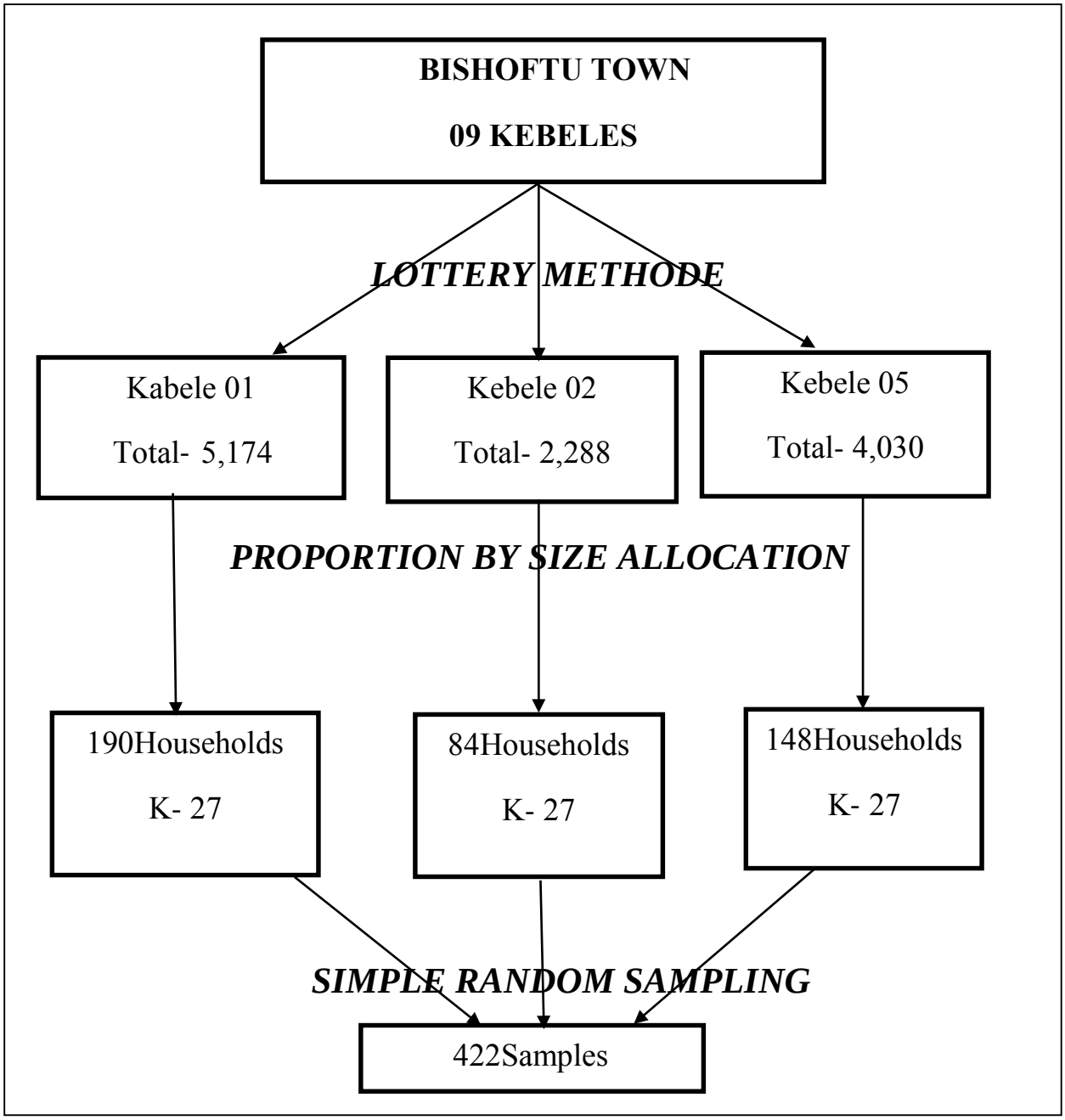

Figure 2- Schematic representation of sampling procedure

4.8. Study variables

4.8.1. Dependent variable

Health seeking behavior

4.8.2. Independent variable

- Awareness of general danger sign (knowledge)
- Socio demographic characteristics (age, sex, occupation, education, number of children, house hold income, cost of health care)
- Cultural beliefs and practices (traditional beliefs, lack of understanding of the problem)
- Geography (urban or rural location, distance from health facility, poor road condition & infrastructure)
- Perceived severity of illness (number of symptoms present, previous experience with child illness)
- Gender difference (preference)

4.9 Operational definition

Good health seeking behavior – Referred to mothers who sought care for their children with general danger signs from formal health care (government health facilities, private hospitals/clinics)

Poor health seeking behavior – Referred to those mothers who did not seek formal care (including purchasing medicines from pharmacy, shop, and traditional healers)

General danger signs – are symptoms that complicate the lives of a child by causing morbidity and possibly mortality. WHO designated danger signs are, not feeding or stopped feeding, convulsion, fast breathing, severe chest in-drawing, fever, hypothermia, weakness or lethargy, sign of jaundice, sign of local infection (4).

Good knowledge on danger sign – referred to mothers who mentioned at least three danger signs (>= 3) (4, 39)

Inadequate knowledge on danger sign – referred to mothers who did not mention at least three danger signs (< 3) (4, 39)

Care taker – is someone who is responsible for the child's welfare in any respect. It could be the child's parents or legal guardians.

Household – a place where a family resides and raise children as well as function as a family.

4.10. Data collection procedures and methods

4.10.1. Data collection tool

A structured interviewer administered questionnaire was used to collect information from study participants. The instrument was adopted from a study conducted in Yemen on Factors affecting health seeking behavior for common childhood illnesses (31) and was modified by the principal investigator as it appears in the litterateur review (4, 19, 20, 39, 40). The questionnaire was designed in English and translated into local languages, Amharic and Oromifa, and then back translated in to English by the third person to check for consistency. The questionnaire was reviewed by concerned experts in the field to keep reliability and validity.

4.10.2. Pre-test

The data collection instrument was pretested in Dukem town on February 2016, in ten percent of non-study participants that fulfilled the inclusion criteria, for its relevance, completeness and clarity to answer the research question and problem. Then the necessary correction and modification of the instrument was done prior to the actual data collection period.

4.10.3. Data collection procedure

The data collection process was guided by an interviewer to gather information from mothers of under-five children in selected households. This process took place throughout the whole data collection period and stopped at the end of the period. Data was checked for completeness and entered in to computer. Three data collectors (voluntary community members who completed grade 12 and above) and one supervisor (Bachelor of Science (BSC) Nurse) were recruited from outside the selected kebeles and were trained on information about the research objective, data collection tools and procedures, and interview methods for one day. An additional training on data completeness, cross-checking and correction actions were given to the supervisor.

4.10.4. Data quality control management

Objectives of the study were explained to data collectors at first. Then they were trained on such issues as the techniques of data collection and face to face interview skills. The training also covered the importance of disclosing the possible benefits and purpose of the study to the study participants before the start of data collection. Mechanisms of maintaining the confidentiality of the participants throughout the whole process of data collection and the study was discussed and ascertained during the training. The researcher checked the completeness and consistencies of questionnaires filled by the data collectors to ensure the quality of the data and also visited the data collectors twice a day to check whether he/she collected the data appropriately. The supervisor reported and discussed with the principal investigator on a daily basis throughout the data collection period The data was compiled and entered at the end of each data collection day.

4.11. Data analysis procedure

After data collection, filled questionnaires were coded and checked for completeness, consistency and clarity. Double data entry was used and entered in to Epi data 3.5 and analyzed using SPSS version 23 statistical soft wares. Frequency tables and descriptive summaries were used to describe the study variables. Significant variables ($P < 0.2$) detected at bivariate level were subsequently entered into Multivariate logistic regression model to control for possible confounding variables, to examine association and to produce crude and adjusted odds ratio along with their corresponding confidence limits (95% CI).

Variables that had significant association with the outcome variables in the crude analysis were entered in to multivariable logistic model. In a Multivariable logistic regression model using adjusted odds ratio (AOR) independent predicators of health seeking behavior among mothers of under five children were identified through controlling the confounding effects of other variables. Before multivariate analysis, independent variables were cheeked for multi co-linearity effect using variance inflation factor and Hosmer lemshow goodness of fit, chi-square was checked for possibility of performing a logistic regression analysis.

4.12. Ethical Considerations

An ethical approval was obtained from research ethical committee of the Department of Nursing and Midwifery. Official letter of cooperation was written to Oromiya Regional Health Office by Department of Nursing and Midwifery. Then Oromiya Regional Health Office wrote cooperation letters to Bishoftu woreda Health office. Then the subsequent letter for the selected kebeles was obtained from the woreda health office. Informed verbal consent was obtained from study participants after a detailed explanation on the purpose and benefit of the study right before the individual data collection. The participants were told that participation was by all means voluntary and their refusal to participate in the study would not result in any form of penalty or mistreatment and were assured that they could withdraw from the study any time they wanted. The respondents were assured that information would remain confidential and would be used for the purpose of this study only. The advantage of their honest decision and response to the successful completion of the study was briefed to the participants to help them involved in the research only willingly.

4.13. Dissemination of results

The result of the study will be presented and submitted to the Department of Nursing and Midwifery, for Ministry of Health and on different seminars. Dissemination of the result will also be made to Bishoftu City Health Administration Office. Manuscript(s) will be submitted for publication in peer reviewed scientific journals.

Chapter 5: Result

Characteristics of the mothers

A total of 422 households with under five mothers were selected to be part of this study. Out of the 422 questionnaires that were administered, 408 questionnaires were correctly completed making a response rate of 96.7%. The mean age was 28.89(SD=7.04) and the large majority of participants (72.8%, n=408) were married. Most of the respondents were orthodox (56.9%) and protestant (24.8%) religion followers. Almost half of respondents (45.6%) were Oromo in ethnicity, followed by Amara (34.3%). Tertiary education level was completed by 27.2% of respondents while primary and secondary educational levels were completed by 26.0% and 26.2% of the mothers respectively. A total of 141 (34.6%) respondents were house wives in their current occupational status, while 20.3% were civil servants. (Table 1)

Information about the under-five child

Almost all of the respondents (n=408, 99.5%) had their child in health institutions while two respondents (0.5%) stated they had home delivery. ANC and postnatal visits were completed by the large majority with 96.1% and 96.6% respectively. Most mothers (71.6%) had two or fewer children and most children (71.8%) were first and second born in the family. Child's age ranged between 1 and 60 months with the mean age of 24.01 (SD=15.48) months. Sex of child was approximately evenly distributed between male (51%) and female (49.0%) and the majority of respondents stated they got their desired sex for their child. From those who didn't have their desired sex (n=60), only two respondents (3.3%) stated that they give less attention to the child during illnesses. The rest (n=60, 96.7%) asserted they give full attention to the less preferred sex during illnesses. (Table 2)

Table 1- Socio-demographic characteristics of participants in study on maternal health seeking behavior for general danger signs in Bishoftu town, 2016 GC (N=408)

Characteristics	frequency	Percent
Age in years		
15-24	107	26.2
25-34	206	50.5
35-44	91	22.3
>45	4	1.0
Marital status		
Married	297	72.8
Single	67	16.4
Divorced	36	8.8
Widowed	8	2.0
Religion		
Orthodox	252	56.9
Muslim	36	8.8
Catholic	17	4.2
Protestant	101	24.8
Other specify*	22	5.4
Ethnicity		
Amara	140	34.3
Oromo	186	45.6
Tigre	42	10.3
Gurage	36	8.8
Other: Specify**	4	1.0
Level of education		
Illiterate	26	6.4
Read and write	58	14.2
Primary	106	26.0
Secondary	107	26.2
Tertiary	111	27.2
current occupation		
House wife	141	34.6
Daily laborer	46	11.3
Civil servant	83	20.3
Merchant	36	8.8
Student	45	11.0
Private organization	33	8.1
Others specify***	24	5.9

*waqefeta, joba witness and apostle

**silte

***factory, lives with parents and pension

Table 2- Characteristics of participants under five children in study on maternal health seeking behavior for general danger signs in Bishoftu town, 2016 GC (N=408)

Variables	frequency	Percentage
Age of child in years		
1-12	155	38.0
13-36	182	44.6
37-60	71	17.4
Sex of the child		
Male	208	51.0
Female	200	49.0
Got desired sex for the child		
Yes	348	85.3
No	60	14.7
Number of children		
1-2 children	292	71.6
3-5 children	116	28.4
Birth order of child		
1^{st}-2^{nd} child	293	71.8
3^{rd}-4^{th} child	115	28.2

Monthly income and health care cost of the mother

Over half of the respondents (60.5%) had low monthly income and the rest were approximately evenly distributed between middle (20.1%) and high (19.4%) monthly income. The mean income was 1,670.84 (SD=1190.9). When respondents were asked if they save money for health costs per month, the large majority (94.1%) said "No" while, only 24 (5.9%) of respondents said they save for health care costs. From those who save (n=24), the mean saving amount was 188.54 birr with SD of 126.83. And when respondents who do not save (n=384) were asked the reason for not saving, half of the respondents (50.2%) stated that they don't have enough money to save for while 121(29.7%) replied saving was not their habit and 25 (6.16%) never thought saving was necessary. The remaining others stated they either have free health care cost from their kebele (6.6%) or has family health insurance from work (1.5%). When respondents without saving for health cost or without free health cost coverage (n=341) were asked what they would do if their child get sick suddenly, treating the illness with home remedy (15.4%), follow religious practices (5.9%), borrow money to seek medical care (16.9%), postponed medical care until illness aggravate (20.8%) and seeking cheaper health care (11.0%) were mentioned as the main actions respondents would take.

The remaining 67(16.4%) mostly mentioned using money from families general saving account or from home expenditure, 9.1% and 2.5% respectively.

Table 3- Participants' monthly income and health care costs for the family in study on maternal health seeking behavior for general danger signs in Bishoftu town, 2016 GC (N=408)

Variables	Frequency	Percentage
Monthly income		
Low income	247	60.5
Middle income	82	20.1
High income	79	19.4
Save money for health costs per month		
Yes	24	5.9
No	384	94.1
Reason for not saving (n= 384)		
Have free health care cost from the kebele	27	6.6
Don't have enough money to save for	205	50.2
Not a habit	121	29.7
Never thought it was necessary	25	6.1
Others: specify*	6	1.5

*family health insurance from work

Awareness of General Danger Signs

Among the surveyed mothers, two hundred and fifty-two (61.8%) of the respondent had previous experience with child illness. Most mothers asserted they were aware of some signs in children under five years of age suggestive of imminent danger. When asked to list those signs, 2 (0.5%) had no knowledge of any and listed none. One, two and three WHO recognized danger signs were correctly listed by 60 (14.7%), 125 (30.6%) and 161 (39.5%) of the respondents respectively, while only 53 (13.0%) and 7 (1.7%) correctly listed four and five WHO recognized danger signs respectively. After this the total respondents (n=408) were further categorized into having good knowledge and poor knowledge based on the maximum number of WHO recognized danger signs known and correctly listed (4, 39). Hence, 207(50.7%) and 201(49.3%) respondents had good and poor knowledge of WHO recognized danger signs respectively. Of the WHO recognized danger signs, fever 306 (75%), vomiting 246 (60.3%), weak and sleepy 148 (36.3%) and watery diarrhea 122 (29.9%) were the most frequent signs mentioned as danger signs by the mothers. Others include not able to drink or breastfeed 80 (19.6%), difficulty in breathing 61 (15%), fast breath 60 (14.7%), convulsion 14 (3.4%) and low body temperature 3 (0.7%). Mothers also mentioned signs

perceived as danger signs which are not WHO recognized. They include but were not limited to cough 37 (8%), loss of appetite 28 (6.9%) and chest pain 10 (2.5%).

When mothers (n=252) were asked how they know about the danger signs, most mothers 95(23.3%) said they learned from health institutions and 61 (15.0%) experience from previous child enabled them to know the signs.

Table 4- Knowledge of the under-five mother on general danger signs in study on maternal health seeking behavior for general danger signs in Bishoftu town, 2016 GC (N=408)

Variables	frequency	Percentage
Child ever been sick		
Yes	252	61.8
No	156	38.2
List of danger signs		
None	2	0.5
At most 1	60	14.7
At most 2	125	30.6
At most 3	161	39.5
At most 4	53	13.0
At most 5	7	1.7
All 9	0	0.0
Knowledge of danger signs		
Good knowledge	207	50.7
Poor knowledge	201	49.3
General danger signs		
Fever	306	75
Not able to drink or breastfeed	80	19.6
Fast breath	60	14.7
Difficulty in breathing	61	15
Weak and sleepy	148	36.3
Low body temperature	3	0.7
Vomiting	246	60.3
Watery stool (diarrhea)	122	29.9
Convulsion	14	3.4
Other specify*	166	40.7
How the mothers know the danger signs (n=252)		
Learned from health institutions	95	23.3
Heard from mass media	22	5.4
From health extension workers	34	8.3
Experience from other mothers	23	5.6
Experience from previous child	61	15.0
Other: specify**	20	4.9

*cough, loss of appetite, chest pain, yellowish discoloration, cry, eye/ear problem…**reading, health professional, once mother, neighbor nurse and usual sickness

Health seeking behavior

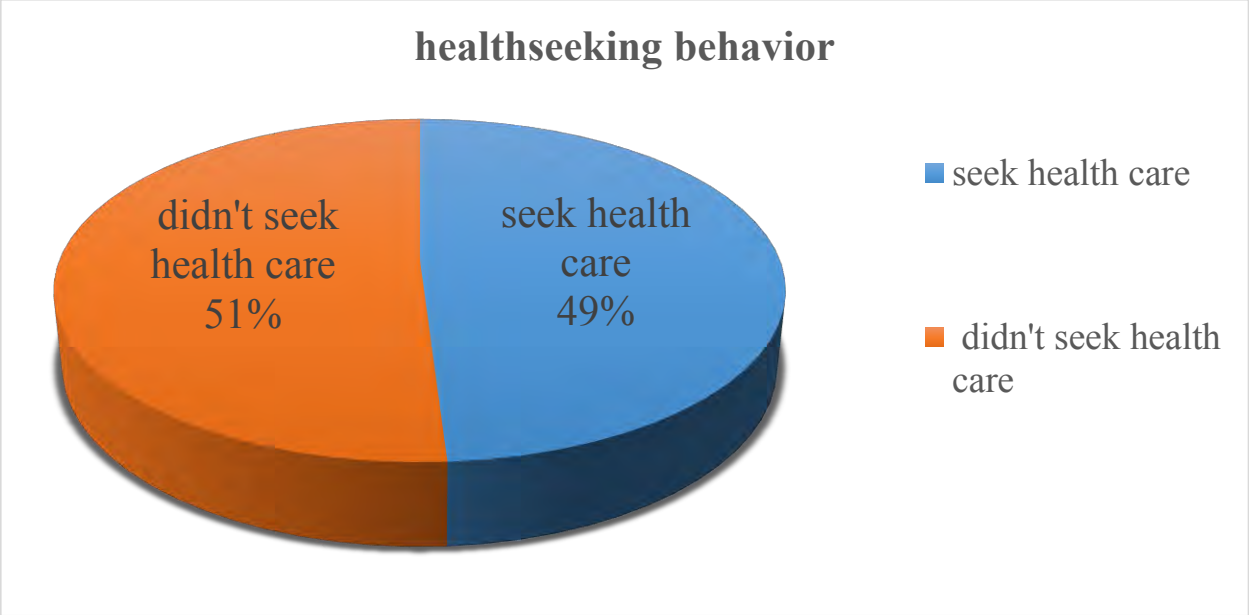

Figure 3- Health seeking behavior among mothers of under five children in study on maternal health seeking behavior for general danger signs in Bishoftu town, 2016 (N=408)

Health seeking behavior among respondents was dichotomized as seeking care and didn't seek care after surveying mothers for their action in times of their child's illness (see figure 1). Of the 408 mothers who have experienced the perceived and WHO recognized danger signs in their children, approximately half of these mothers 200 (49%) took the child to hospital/ health facility immediately without any home intervention. Ninety two (22.5%) of these mothers did nothing while the remaining 116 (28.5%) did the following: 77 (18.9%) used different types of homemade remedies to treat illnesses, such as, rice water for diarrhea, different herbs to cure sudden illness and tepid sponge bath for fever, 24 (5.9%) of mothers purchased over the counter medications which were previously effective against child illness, 15 (3.7%) of respondents followed different kinds of religious practices such as using holy water and prayers on their child. After these initial and various interventions (n=116), 36 (31.03%) and 80 (68.96%) didn't and did take their child to health facility respectively.

When those mothers (n=80) who delayed seeking medical care up to 72 hours and more were asked the reasons for delaying care,27 (33.75%) of mothers perceived illness as mild, 24 (30%) thought illness would subside by itself, 14 (17.5%) of respondents said they had no money at hand on time

of illness, 10 (12.5%) mentioned illness was the same with an elder child and the remaining 3 (3.75%) and 2 (2.5%) thought the medication they gave would work and were advised not to go respectively.

Bivariate and multivariate logistic regression analysis of health seeking behavior and its explanatory variables

Binary Logistic regression was performed to assess the association of each independent variable with health seeking behavior. The factors that showed a significant level of 0.2 and less in addition to those with a significant value of ($p < 0.05$) were added to multivariate regression model. The model contained nine independent variables and the result showed that five of the variables, (marital status, and current occupation, money saving for health, child age and desired sex of child) are not associated with health seeking behavior though they were associated at the bivariate level.

The result also revealed that educational level of the mother was among the variables that were found to be associated with HSB. Mothers with higher educational level (tertiary) were found to have six times more HSB than those who were illiterate. Mothers with secondary and primary educational level have half and almost one fold HSB than the illiterates respectively.

The other variables that were found to have association were the participants' monthly income and their previous experience with child illness. Participants who had high monthly income were to have nine folds more HSB than those with low income and participants with middle level of income were found to be almost half times more health care seekers than mothers with low income.in addition respondents who had no previous experience with child illness were found to have six folds more HSB than those who had previous experience with child illnesses.

Furthermore, participants' knowledge about general danger signs among children was also found to affect the outcome variable. Those with good knowledge were over three times more to have HSB than those with poor knowledge about general danger signs.

Table 5- Bivariate and multivariate logistic regression analysis of health seeking behavior in study on maternal health seeking behavior for general danger signs in Bishoftu town, 2016 (N=408)

HEALTH SEEKING BEHAVIOUR FOR GENERAL DANGER SIGNS						
Variables	**seek health care**	**Didn't seek health care**	**COR**	**(95% C.I)**	**AOR**	**(95% C.I)**
Marital status						
Married	156	141	7.7	(0.9 - 63.7)	8.9	(0.5 - 16.6)
Single	26	41	4.4	(0.5 - 38.2)	2.3	(0.1 - 45.9)
Divorced	17	19	6.3	(0.7 - 56.2)	11.1	(0.5 - 22.8)
Widowed	1	7	1	1	1	1
Educational level						
Tertiary	94	17	8.8	(3.4 - 22.7)	5.6	(1.6 - 20.1)*
Secondary	31	76	0.7	(0.3 - 1.6)	0.5	(0.2 - 1.5)
Primary	42	64	1.1	(0.4 - 2.5)	0.8	(0.3 - 2.4)
Read and write	23	35	1.1	(0.4 - 2.7)	0.9	(0.3 - 2.7)
Illiterate	10	16	1	1	1	1
Current occupation						
Unemployed	30	64	0.6	(0.4 - 1.2)	0.9	(0.5 - 1.8)
Self employed	99	49	2.7	(1.7 - 4.3)	1.3	(0.6 - 2.5)
Employed	71	95	1	1	1	1
Monthly income						
High income	71	8	13.9	(6.4 - 30.3)	9.0	(3.8 - 21.9)*
Middle income	33	49	1.1	(0.6 - 1.8)	0.45	(0.2 - 0.9)
Low income	96	151	1	1	1	1
Money saving for health						
Yes	18	6	3.3	(1.3 -8.6)	1.5	(0.4 -5.0)
No	182	202	1	1	1	1
Child age						
1-12 months	83	72	2.0	(1.1 - 3.6)	0.5	(0.2 - 1.3)
13-36 months	91	91	1.7	(0.9 -3.0)	1.1	(0.5 -2.3)
37-60 months	26	45	1	1	1	1
Got desired sex of child						
Yes	176	172	1.5	(0.9 -2.7)	1.4	(0.7 -3.1)
No	24	36	1	1	1	1
Child previously sick						
No	105	51	3.4	(2.2 -5.2)	6.3	(3.2 -12.3)*
Yes	95	157	1	1	1	1
Maternal knowledge						
Good knowledge	117	90	1.8	(1.2 -2,7)	2.6	(1.5 -4.5)*
Poor knowledge	83	118	1	1	1	1

**P value is significant at P<0.05 P value of Hosmer and Lemeshow Test = 0.151*

Chapter 6: Discussion

The available evidence suggests that if mothers of under five children practiced appropriate and timely HSB, a significant impact on child survival will be exhibited eventually (41). Hence, findings from this study will help us know what mothers' behavior towards seeking care in time of illnesses of their under-five child looks like and also provide us with further understanding about the factors that play a role in determining their HSB. Thus the results may be considered as baseline information to aid the planning of action to reduce and control the mortality and morbidity that relate to general danger signs. Furthermore, improvements could be planned to change seeking behaviors of mothers around the country.

In this study, 200 (49%) of mothers sought immediate medical care for their child's illness. This implies that mothers perceive seeking medical care as the only choice when they recognize signs of illness that introduced imminent danger to the child. This is by some means comparable with a study conducted in south-east Nigeria (4) and Yemen (31) where approximately half of the mothers (n=125, 47.7%) and (n=109, 51.42%) respectively, sought immediate care without any home intervention. However, this figure is lesser when compared to other similar studies done in Nicaragua(28) and Pakistan (7) where HSB was >75% and 90.1% respectively. This difference might be due to the facts that good proportion of the participants in the two study settings were literate with better income and affordable health costs, moreover as part of the countries health promotion program, regular community visits by government health staff members at least once a year also contributed for the high rate of seeking behavior in the two studies.

Here in our country Ethiopia, a study conducted on HSB for common childhood illness (6) exhibited more seeking behavior (72.7%) than this study (HSB for general danger signs). This difference may be indicative of health educations given in health facilities by health professionals in the country mainly focuses on disease specific signs such as sign for pneumonia, malaria and acute respiratory illness rather than general danger signs in general.

In this study, educational level of mothers was found to be associated with health seeking behaviors of the mothers. HSB was significantly higher among participants with tertiary level of education [adjusted OR=5.6, (95% CI: 1.6 - 20.1)] compared to those who were illiterate. This finding could also be supported by a similar study conducted in Tribal Community of Gujarat, India(35) in which

Of the 98 illiterate mothers, 24.5% had healthcare-seeking behavior, whereas, among the 307 (75.8%) literate mothers, 78.3% had healthcare-seeking behavior, showing a great behavioral difference among the two groups. This difference could be attributed to the fact that educated women tend to provide better health care and hygienic practices and are more likely to seek help when a child is ill. Another study in a rural community in West Bengal, India(34) also has similar finding in which literate mothers sought more care (78.3%) than the illiterates (24.2%). Likewise a similar study from Yemen (31), discloses that mothers sought medical care significantly more when they had a higher level of school education (POR 5.85, 95% CI: 2.34–14.61). In general, information about educational level of mothers will be helpful in planning health education of mothers in order to improve health care seeking knowledge and practices.

Another association found in this study was between HSB and monthly income of mothers, in which HSB was significantly higher among participants who had high monthly income (adjusted OR= 9.0, 95% CI: 3.8 - 21.9) than their respective referent group. This result is consistent with a study conducted in rural Bangladesh where higher socioeconomic status was associated with increased likelihood of care seeking behavior in which, respondents in the richest group were >1.5 times more likely to seek care compared to the respondents in the poorest group (RR:1.57, 95% CI:1.29 - 1.9). Likewise, studies from Granada Nicaragua, Guatemala and Kenya (27, 28, 30) revealed that health seeking behavior is highly affected by economic status of the mother. This finding highlights that lack of finance is a serious constraint on a family's choices about how to treat children's illnesses. This in turn elicits the need to work on health cost coverage options for families with low monthly income.

Previous child illness was found to be associated with HSB in which those mothers whose child has never been sick were found to have more HSB (adjusted OR=6.3, 95% CI: 3.2 - 12.3) than those whose child had previous illness experience. This might be due to the fact that mothers whose child had never been sick were found to be new mothers with their first born and might have anxiety and fear which drives them to take the ultimate option which in health-illness continuum is seeking professional health care from health institutions.

On the other hand mothers who had previous experience with child illness might be a bit reluctant to take measures as they perceive the situation simple and similar as previous child illnesses. As a result they will take other options than seeking immediate care.

Furthermore, HSB was significantly higher among participants with good knowledge on general danger signs than those with poor knowledge (adjusted OR=2.6, 95% CI: 1.5 - 4.5). This is in line with other studies conducted in Peri Urban Wardha (19) and Pakistan(7) in which awareness of danger signs was a strong determinant of HSB. In Pakistan alone, of the 90.1% of mothers who sought care, the majority of the mothers were aware of the signs (81.5%). Similar result was exhibited in Nigeria (4), HSB was significantly determined by knowledge of WHO recognized danger sign (OR 4.6, CI: 1.1 - 18.7, P = 0.032). This implies that if mothers have awareness of danger signs they will definitely know that seeking immediate care is the only choice they have to save the life of their child or prevent further health complications.

Chapter 7: Strength and Limitations of the study

Strength

- The study was community based and addresses a current and most essential area of interest in reflecting the mothers' HSB.
- The output could be used in planning of programs to improve HSB of mothers in the health sector by giving insights on essential determinants of behaviors

Limitations

- Since the study is a cross sectional study, it didn't address the cause-effect relationship between the determinants of HSB and the outcome of interest, HSB.

- Likewise, most of the respondent didn't have a sick child at the time of data collection, so they were requested to remember previous child illness event's which may result in a recall bias.

Chapter 8: Conclusion

This study concludes that almost half (49%) of mothers of under five children in Bishoftu town sought appropriate health care from both government and private health institutions. Of the many independent variables, maternal knowledge of general danger signs and maternal educational status were found to be strong determinants of mothers' prompt health care seeking behavior for general danger signs. In addition, previous experience with child illness and monthly income significantly influenced mothers' care seeking practice and alternative measures taken to cure illnesses.

Although cultural and religious practices, geographical setting, gender difference and perceived severity of illness were found to be strong determinants of HSB in most African studies, this study found no significant association between these independent variables and the outcome variable.

In conclusion, although there is an inevitable change in the health sector of the country, especially on mother and child health, there still should be continuous education of mothers on recognition of danger signs in under five children and the need to seek immediate as well as appropriate medical care in health facilities.

Chapter 9: Recommendations

- **Government level: -** Community oriented promotion of HSB and practices by using health extension worker and by increasing mothers' participation on child health issues.
    - Work on reducing health care costs by designing and strengthening alternative health care cost coverage (public health insurance programs, funding government health sectors)
- **Facility level: -** health institutions especially antenatal and postnatal care visits is one of the key intervention area of maternal and child health. Hence, health workers should focus on creating awareness and designing detailed health education around general danger signs for under five children when mothers attend these visits.
- **Researcher: -** nationally representative studies which involve communities at different level are recommended.

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Annexes

Annex I: Information Sheet Individual Consent Form

Information sheet

Informed Consent form for study conducted on Assessment of Health Seeking Behavior and Associated Factors for General Danger Signs among Mothers of under Five Children in Bishoftu Twon, Oromya.

Introduction: Hello, my name is _____. I am working with Addis Ababa University to do research on Health Seeking Behavior for General Danger Signs.

Title: Assessment of health seeking behavior and associated factors for general danger signs among mothers of under five children in Bishoftu town, East shoa zone, Oromiya.

Purpose of the study. The purpose of the study is to assess health seeking behavior and associated factors for general danger signs among mothers of under-five children in Bishoftu town. The study will primarily important for the researcher on getting master degree from Addis Ababa University and to enhance awareness of study population towards what a general danger sign is and the importance of seeking health care.

Procedures: We are going to ask you for information concerning about you and your child's demographic background characteristics, as well as other topic related to your child's health and illness management experiences. The interview takes approximately 15 to 20 minutes to complete. There is no right or wrong answers. Some of the topics may be difficult to remember and discuss, but it would be so helpful if you try to address them as much as possible.

Confidentiality: I want to assure you that all of your answers will be kept strictly secret. I will not keep a record of your name or address.

Risks and Benefits of the Study: By participating in this study, you will not receive any direct benefit. However, you will help to increase our understanding towards factors related to health seeking behavior and the result of the study would hopefully serve as an important input to intervention programs that aim at improving health seeking behaviors of mothers for their children. Your participation in this study may have minimal risk.

Rights: Your participation in this study is voluntary and you have the right to stop the interview at any time, or to skip any questions that you don't want to answer. Your participation is completely voluntary but your experiences could be very helpful to other women in country. If you need additional Information use the address below.

Tel- 0913634088

Mail - kalkidan.wd@gmail.com

Consent Form

I have read the above information, or it has been read to me. I have had the opportunity to ask questions about and any question that I have asked have been answered to my satisfaction. I consent voluntarily to participate in the study and understand that I have the right to withdraw from the study at any time without in any way affecting my right.

Signature of volunteer: _____ Date: _____

Signature of Data collector: _____ Date: _____

Annex II: Questionnaire Form: English Version

Questions related to the determinants of health care seeking behavior for general danger signs among mothers of under-five in Bishoftu town.

Date _____Questionnaire code: _____

Instruction: choose the appropriate answers of the study participants for each of the following questions.

Part 1- Socio-demographic characteristics			
No	**Question**	**Coding category**	**Skip**
101	Age of the mother		
102	Marital status	1. Married 2. Single 3. Divorced 4. Widowed	
103	Religion	1. Orthodox 2. Muslim 3. Catholic 4. Protestant 5. Other: specify	
104	Ethnicity	1. Amara 2. Oromo 3. Tigre 4. Gurage 5. Other: Specify	
105	Completed education with the following options	1. Illiterate 2. Read and write 3. Primary 4. Secondary 5. Tertiary	
106	What is your current occupation?	1. House wife 2. Daily laborer 3. Civil servant 4. Merchant 5. Student 6. Private organization 7. Others specify……	
Part 2- Characteristics of the under-five child			
201	Age of the child		
202	Sex of the child	1- Male 2- Female	
203	Did you get your desired sex for your child?	1- Yes ⟶ 2- No	205

204	Do you give less attention for the child with less preferred sex? For example when the child get sick?	1- Yes 2- No	
205	Have you had ANC visit?	1- Yes 2- No	
206	Place of delivery	1- Health institution 2- Home	
207	Have you had postnatal visit?	1- Yes 2- No	
208	Number of children		
209	What is the birth order of the child		
Part 3- Monthly income and health care cost for the family			
301	What is the monthly income of the family?		
302	Do you save money for health costs per month?	1- Yes 2- No →	304
303	What is the average amount of money you assign for health costs per month?	→	401
304	Why don't you save money for health cost permonth?	1- Have free health care cost from the kebele → 2- Don't have enough money to save for 3- Not a habit 4- Never thought it was necessary 5- Others: specify……	401
305	What would you do if your child get sick Suddenly then?	1- Treat the illness with home remedy 2- Follow religious practices until illness subsides 3- Borrow money and seek medical care 4- Postponed medical care until illness aggravate 5- Try to seek cheaper health services 6- Others: specify……..	

Part 4- Awareness of general danger signs			
401	Has your child ever been sick?	1- Yes 2- No	
402	What are some of the danger signs you know in children that threaten a child's life?	1- Fever 2- Not able to drink or breastfeed 3- Fast breath 4- Difficulty in breathing 5- Became weak and sleepy 6- Low body temperature 7- Vomiting 8- Watery stool (diarrhea) 9- Convulsion 10- Other: specify…….	
403	How do you know about this danger signs?	1- Learned from health institutions on health visits 2- Heard from mass media 3- Learned from health extension workers 4- Experience from other mothers 5- Experience from previous child 6- Other: specify----------	
Part 5- Health seeking behavior			
501	What did you do first when the child exhibits one of the above danger signs?	1- Waited for illness to subside/no action taken 2- Took the child to private clinic for medical care 3- Took the child to government health facility for medical care 4- Purchased medicines from a pharmacy 5- Home treatment with traditional remedies 6- Consulted a traditional healer 7- Followed religious practices 8- Other: specify…….	
502	Did you take your child to health facility after your initial non-medical intervention? (for mothers who didn't take child to health facility initially)	1- Yes 2- No	
503	How long was the complaint present before seeking medical care? (for mothers who took the child to health facility after initial intervention)	1- One day 2- Two days 3- Three days 4- Other specify……..	
504	Why did you delay seeking medical care to after 72 hours?	1- Health institution was far from home 2- Thought illness would get better by itself 3- Had no enough money 4- Transportation difficulties 5- I was not allowed to go 6- Illness was mild 7- Sign was the same with older child 8- Other: specify	

Annex III: Amharic Version Consent

የመጠይቁመለያቁጥር_____

ከእንግሊዝኛ የተተረጎመ የአማርኛ መጠይቅ

<u>መግቢያ ፤</u> ጤና ይስጥልኝ ስሜ _____ይባላል:: በአሁኑ ግዜከአዲስ አበባ ዩኒቨርሲቲ ጋር በመሆን እድሜያቸው ከ5ዓመት በታች የሆኑ ህፃናት እናቶች
የልጆቻቸውየጤናመቃወሱንየሚጠቁሙአደገኛምልክቶችንበተመለከተየሚሰጡትንህክምናአርዳታምላሽተመርኩዤጥናት በማድረግ ላይ እገኛለሁ።

<u>የጥናቱ ርዕስ፤</u> በቢሾፍቱ ከተማእድሜያቸው ከ5ዓመት በታች የሆኑ ህፃናት እናቶች
የልጆቻቸውየጤናመቃወሱንየሚጠቁሙአደገኛምልክቶችንበተመለከተየሚሰጡትህክምናአርዳታምላሽእንዲሁምየህክምናአርዳታእንዳይፈልጉየሚያደርጓቸውተያያዥምክኒያቶችበተመለከተ ይሆናል።

<u>የጥናቱ ዓላማ፤</u> በቢሾፍቱ ከተማእድሜያቸው ከ5ዓመት በታች የሆኑ ህፃናት እናቶች
የልጆቻቸውየጤናመቃወሱንየሚጠቁሙአደገኛምልክቶችንበተመለከተየሚሰጡትህክምናአርዳታምላሽእንዲሁምየህክምናአርዳታእንዳይፈልጉየሚያደርጓቸውተያያዥምክኒያቶችመለየት በተመለከተ ይሆናል።ጥናቱበዋናነት ከአዲስ አበባ ዩኒቨርሲቲ የማስተርስ ዲግሪን ለማግኘት የተደረገ ጥናት ሲሆን አፋጣኝ የህክምና እርዳታ ምላሽ ጠቀሜታን በተመለከተየተሳታፊዎችንግንዛቤምይጨምራል።<u>የጥናቱ አካሂድ ስርአት፤</u>መጠይቁ ከ15 እስከ 20 ደቂቃ ይወስዳል።በመጠይቁ ስለ እርሶና ልጅዎ አጠቃላይ ማህበረሰባዊ መረጃ፣ ስለ ልጆት ጤና እና ህመም በሚያጋጥምበት ወቅት የሚወስዱትን አጠቃላይ እርምጃ ተመልከቶ ጥያቄዎች ተካተዋል።የሚሰጡት ምላሾች በሙሉ የእርሶ ግላዊ አመለካከት በመሆኑ ትክክል ወይም ስህተት ተብለው አይከፈሉም ። አንዳንድ ጥያቄዎችን በቀጥታ ለማስታወስና ለማብራራት አዳጋች ቢሆንም እንኳን ሁሉንም ጥያቄዎች አስታውሰው ለመመለስ ቢሞክሩ ለጥናቱ ውጤታማነት ትልቅ ጠቀሜታ ይኖረዋል።

<u>የጥናቱ ሚስጥራዊነት፣</u>እርሶየሚሰጡንማንኛውምመረጃበሚስጥርስለሚጠበቅሎትማንነትዎእንዳይታወቅስም እናአድራሻዎትአይገለፅም።

<u>የጥናቱ ጥቅምና ጉዳት፣</u>በዚህጥናትላይበመሳተፎትሆነመጠይቁንበመመለስዎየተዘጋጀከፍያየለም።ነገርግንእናቶች ለልጆቻቸው ህክምና እርዳታ አስፈላጊነት ላይ ያላቸውን
ግንዛቤእንድናውቅይረዳናልበተጨማሪምየጥናቱውጤትበእርግጠኝነትየልጆችንጤናየሚያግዙስራዎችላይ ግብአትይሆናል።
እናምየእርሶተሳትፎምንምአይነትጉዳትአያደርስቦትም።

<u>የተሳታፊ መብት፣</u>የእርሶበዚህ ጥናትላይመሳተፍበፍላጎትላይየተመሰረተነው።
በማንኛውምሰዐትውይይቱንማቆምወይንምመመለስየማይችሉትንጥያቄወችማለፍይችላሉ።
ተሳትፎዎበእርሶሙሉፍላጎትላይየተመሰረተነውነገርግንየእርሶልምድለሀገሪቱእናቶችና ህፃናትበጣምጠቃሚነው።

<u>ስምምነትን ማስታወቅ፣</u>
ከዚህበላይየተፃፈውመረጃተነቦልኝወይንምአንብቤውእናምእኔምማወቅየምፈልጋቸውእናየምጠይቃቸውጥያቄምበአጥጋቢሁኔታእንደሚመለሱልኝአውቄለው።በመጨረሻምየጥናቱተሳታፊመሆኔንየምገልፀውበማናቸውምሰዓት ጥናቱን ማቋረጥ እንደምችል መብቴ ተነግሮኝ ነዉ።የተሳታፊ ፊርማ _____ ቀን _____ የመጠይቁ ሰብሳቢ ፊርማ _____ ቀን _____

Annex IV: Questionnaire Form: Amharic Version

በቢሾፍቱከተማእድሜያቸውከ5
ዓመትበታችየሆኑህፃናትእናቶችየልጆቻቸውየጤናመቃወሱንየሚጠቅሙአደገኛምልክቶችንበተመለከተየሚሰጡትህክምናእርዳታምላሽእን
ዲሁምየህክምናእርዳታእንዳይፈልጉየሚያደርጓቸውተያያዥምክኒያቶችበተመለከተመረጃለመሰብሰብየተዘጋጀመጠይቅ፤

ማስታወሻ፡- ይህመጠይቅተሳታፊዎቹፍቃደኛነትከታወቀበኃላመሞላትያለበትበጠያቂውብቻነው::
እባክዎንየተቀበሉዋቸውንመልሶችየያዘውንፊደልያክብቡ::

ክፍል አንድ ፤ የተጠያቂውን አጠቃላይ ማህበራዊና ግላዊ መረጃን በተመለከተ			
ተ.ቁ	**ጥያቄ**	**አማራጭ መልስ**	**እለፍ**
101	እድሜዎት ስንት ነው ?		
102	የጋብቻ ሁኔታ	1. ያገባች 2. ያላገባች 3. የፈታች 4. ሌላ ካለ ይጥቀሱ	
103	እምነትዎ ምንድነው ?	1. ኦርቶዶክስ 2. ሙስሊም 3. ካቶሊክ 4. ፕሮቴስታንት 5. ሌላ ካለ ይጥቀሱ	
104	ብሄርዎት ምንድነው ?	1. አማራ 2. ኦሮሞ 3. ትግሬ 4. ጉራጌ 5. ሌላ ካለ ይጥቀሱ	
105	የትምህርት ሁኔታ	1. ያልተማረች 2. ማንበብና መፃፍ 3. የመጀመሪያ ደረጃ 4. ሁለተኛ ደረጃ 5. ከፍተኛ ተቋም	
106	ስራዎት ምንድነው ?	1. የቤት እመቤት 2. የቀን ሰራተኛ 3. የመንግስት ሰራተኛ 4. ነጋዴ 5. ተማሪ 6. የግል ሰራተኛ 7. ሌላ ካለ ይጥቀሱ	
ክፍል ሁለት፡ የህፃኑ ግላዊ ሁኔታ			
201	የልጅዎ እድሜ ስንት ነው ?		
202	የልጅዎ ፃታ ምንድነው ?	1. ወንድ 2. ሴት	
203	ይመኙት የነበረውን ጾታ ነው ያገኙት?	1. አዎ → 2. አይ	205
204	የተመኙት ፆታ ስላልሆነ ልጅዎ ቢታመም አስፈላጊውን እንክብካቤና የጤና ክትትል አያደርጉለትም ?	1. አዎ 2. አይ	

205	የቅድመ ወሊድ ክትትል ነበሮት?	1. አዎ 2. አይ	
206	ልጅዎን የወለዱት የት ነው ?	1. ጤና ተቋም 2. ቤት	
207	የድህረ ወሊድ ክትትል ነበሮት?	1. አዎ 2. አይ	
208	ስንት ልጆች አልዎት ?		
209	ስንተኛ ልጅት ነው		
ክፍል ሶስት፡ ወርሃዊ ገቢ እና የቤተሰብ የጤና ሽፋን			
301	የወር ገቢዎ ምን ያህል ነው ?		
302	በወር ለህክምና ብለው የሚያስቀምጡት (የሚቆጥቡት) ገንዘብ አለ ?	1. አዎ 2. አይ →	304
303	በወር ምን ያህል ገንዘብ ለህክምና ወጪ ያስቀምጣሉ ?	→	401
304	በወር ለምን ለህክምና ወጪ ብለው አያስቀምጡም (አይቆጥቡም) ?	1. የነፃ ህክምና ወረቀት ከቀበሌ አለኝ → 2. ለመቆጠብ የሚበቃ በቂ ገንዘብ የለኝም 3. ልምዴ አይደለም 4. አስፈላጊ ነው ብዮ አላሰብኩም 5. ሌላ ካለ ይጥቀሱ	401
305	ታዲያ ልጅዎ በድንገት ብትታመም/ቢታመም ምን ያደርጋሉ ?	1. በቤት ውስጥ የሚዘጋጁ የህመም ማስታገሻዎችን እሰጣለሁ 2. በእምነቴ በሽታውን ለማዳን (ለማስታገስ) እሞክራለሁ 3. ገንዘብ ተበድሬ ወደ ህክምና ተቋም እወስዳለሁ 4. በሽታው ካልከፋ (ካልባሰ) ህክምና አልወስድም 5. በአነስተኛ ገንዘብ ህክምና ወደማገኝበት እሄዳለሁ 6. ሌላ ካለ ይጥቀሱ	
ክፍል አራት፡ አደገኛ የህመም ምልልቶችን ስለማወቅ			
401	ልጅዎት ታሞ/ታማ ያውቃል/ታውቃለች ?	1. አዎ 2. አይ	
402	አደገኛ የህመም ምልክቶች የሚሉት የትኞቹን ነው ?	1. ትኩሳት 2. አለመጥባት 3. ቶሎ ቶሎ መተንፈስ 4. ለመተንፈስ መቸገር 5. የድካም ስሜት 6. የሰውነት ሙቀት መቀነስ	

		7. ማስመለስ 8. ማስቀመጥ 9. መንቀጥቀጥ 10. ሌላ ካለ ይጥቀሱ	
403	ከላይ ስለጠቀሱት አደገኛ ምልክቶች ከየት አወቁ ?	1. ለምርመራ ጤና ተቋም ስሄድ አስተማሩኝ 2. ከመገናኛ ብዙሀን ሰምቼ 3. የጤና ኤክስቴንሽን ሰራተኞች አስተምረውኝ 4. ከሌሎች እናቶች ልምድ ቀስሜ 5. ከመጀመሪያ ልጄ ልምድ ቀስሜ 6. ሌላ ካለ ይጥቀሱ	
ክፍል አምስት፡ የህክምና እርዳታ ፍላጎትን በተመለከተ			
501	ልጅዎ ከላይ ከተጠቀሱት ምልክቶች አንዱን ሲያሳይ/ስታሳይ በመጀመሪያ ምንአደረጉ ?	1. ምንምሳላደርግህመሙበራሱእስኪቀንስጠበኩ 2. የግልጤናተቋምወሰድኩት/ወሰድኳት 3. የመንግስትጤናተቋምወሰድኩት/ወሰድኳት 4. ከመድሀኒት መደብር በፊት የታዘዘለትን/የታዘዘላትንገዝቼሰጠሁት/ሰጠኃት 5. ቤት ውስጥ የሚዘጋጁማስታገሻመድሀኒቶችንሰጠሁት/ሰጠኃት 6. ወደእምነትተቋምወሰድኩት/ወሰድኳት 7. ሌላካለይጥቀሱ	
502	ለልጅዎ ማስታገሻ ከሰጡ በኃላ ወደ ህክምና ተቋም ወስዱ (ወደ ህክምና ተቋም ቀድመው ላልወሰዱ)	1. አዎ 2. አይ	
503	ወደጤናተቋምከመውሰዶ በፊትህመሙ ምን ያህልቀንቆየ ?	1. የመጀመሪያው ቀን ወሰድኩት/ወሰድኳት 2. ሁለተኛው ቀን ወሰድኩት/ወሰድኳት 3. ሶስተኛው ቀን ወሰድኩት/ወሰድኳት ሌላ ካለ ይጥቀሱ	
504	ወደ ህክምና ለመውሰድ ለምን እስከ 72 ሰአት ቆዩ?	1. ጤና ተቋሙ ከቤቴ ስለሚርቅ 2. ጤናው/ጤናዋ በራሱ ይመለሳል ብዬ 3. ገንዘብ በእጄ ላይ ስላልነበረ 4. ቤቴ ለትራንስፖርት ስለማያመች 5. እንዳልሄድ ሰዎች መክረውኝ / የተሸለ ያሉትን ነግረውኝ 6. ህመሙ ከባድ ስላልነበረ 7. ትልቁ/ትልቋ ልጄ ታሞ/ታማ የምታውቀው በሽታ አይነት ስለነበረ 8. ሌላ ካለ ይጥቀሱ፡	

Annex V: Afan Oromifa Version Consent

Waraqa eyyamaa gaafachuu

Waraqa eyyamaa qorennoo magaala Bishooftuu erratti dhimma fayyaa haadholiin mallattolee dhukkuba baalafemaa ijoolee waggaa 5 gad qebaniif amala mana yaalee deemu fi wantoota mallattoo balaafamee fidan addaa baasuuf ta'u.

Seensa: akkam jirtu maqaan koo_____. Iddon hojii koo_____ ken hojjedhu yuuniversitii Addis Ababa keessa yoo ta'u, qorennoo dhimma emale mallattoo waliigala balaa tesaa fideniif ilaalcha fayyaa barbaaduuf ta'u.

Mataa-duree – qorennoo amala haadhooleen adeemse yaalii deemuun fi wontoota mallattoo balaa tesaa fiden daa'imman waggaa 5 gadii irratti godhamuf magaala Bishooftu, Godina Shawaa Bahaa, Oromiyaa.

Kaayyoo qorennoo – kaayyoon qorennoo kenaa amala hadhooleen adeemse yaalii deemuu fi wantoota mallattoo balaa tesaa fiden daa'immaan waggaa 5 gadii ta'en iratti magaala Bishooftutti ta'u. qorennoon kun digrii 2^{ffaa} yuuniversitii Addis Ababa argachuu fi akkasumas ummata qorennoo kana keessatti hirmatan waa'ee mallattoo dhukkube balaa cimaa fideen irratti hubennoo yookiin kaka'umsa fiduuf fayyada.

Adeemsa – gaaffilee waliigalaa waa'ee daa'ima keeti fi akkasumas fayyaa daa'ima keetii fi muuxxannoo haala itti Daa'ima kee yaala turte si gaafachuuf ta'a gaaffii fi deebichis daqiiiqaa 15 hanga 20 fudhata. Deebiin sirrin yookiin sirrin hin taane hin jiru. Matadureen tokko tokko yaadachuuf rakkisuu mala garuu osoo yaaddatanii baay'ee nu gargaaru.

Iccittii – deebiin isin deebiftan hunduu iccittin akka qabamuu isinitti himuu barbaada meqaa fi sagaleen keessan galmaa'ee hin taa'u.

Bu'aa fi midhaa qorennoo – qorennoo kenarratti hirmaachuu keessanif qofa kaffalliin kallattin argatan hin jiru. Garuu hirmaachun keessan waa'ee tajaajila fayyaa barbaaduu haadhoolee daa'imma dhukkubseteniif kaka'umse uuma akkesumas bu'aa qorennoo kenaas furmaata waa'ee tajaajila fayyaa barbaaduuf ni fayyada. Hirmannan keessan midhaa xiqqoo fiduu mala.
Mirga – hermannen keessan fedhii keessan irratti kan hundaayee dha, kenaafuu waan isiinif hin gallee yeroo keninuu dhaabuu dendeessu.hirmannan keessan fedhii irratti kan hundaaye yoo ta'u

garuu muuxxennoon keessen hadhoolee biraaf gargaara yoo gaaffii dabalataa qabaattan lakkoffsa armaan gadii keneen ni argama.

Tel: 0913634088

Mail kalkidan.wd@gmail.com

Ukaa eeyyamaa

Wantoota armaan olitti ibsaman kana dubbisee jira. Gaaffii gaafachuufis cerraa gafadheeraa.

Hirmannaan koos fedhii kootin waan ta'eef yerroon berbaadtti hirmannaa koos dheebuu akkan danda'u hubadheen jira.

Mallattoo hirmaattotaa_____ guyyaa_____

Mallattoo nama odeeffannoo guuree_____ guyyaa_____

Annex VI: Questionnaire Form: Afan Oromifa Version

Gaaffilee dhimma fayyaa ilaallatan kan yeroo mallattooleen dhukkuba balaafama agarsiisan mullisu hadholi ijoollee waggaa 5 gad qaban ta'ee bishooftuutti argaman. Guyyaa: _____ Gaaffiilee koodii: _____ Qajeelfama: Deebii hadholi ijoollee waggaa 5 gad qaban deebissan filadhu.

Kutaa 1: Gaaffilee odefannoo dhuunfaa ilaallatan			
Lakk	**Gaaffilee**	**Koodata gartuulee**	**Utaali**
101	Umurii haadhaa		
102	Gaaila ilaalchise	1. Heerumte 2. Hin heerumte 3. Kan hiikte 4. Kan irraa du'ee	
103	Amantii	1. Ortodooksii 2. Muslima 3. Kaatholikaa 4. Pirotestaantii 5. Kan biraa (ibsi): _____	
104	Saba	1. Amaaraa 2. Oromoo 3. Tigiree 4. Guraagee 5- Kan biraa (ibsi):_____	
105	Sadarkaa barnootaa	1. Kan hin baratin 2. Barreessuu fi dubbisuu 3. Sadarka 1ffaa 4. Sadarka 2ffaa 5. Sadarka olaanaa	
106	Hojii	1. Haadha manaa 2. Hojii guyyaa guyyaa 3. Hojjetu sivilservisii (hojjettuu mootuma) 4. Daldaltun 5. Barattuu 6. Kan biraa (ibsi): _____	
Kutaa 2: Ragaalee kan mucaa			
201	Umurii daa'imaa		
202	Saala daa'imaa	1- Dhiira 2- Dubara	
203	Mucaa saala barbaaddan argattani?	1- Eeyyee → 205 2- Lakki	

204	Saala hin fedhin yoo argatten ilaalcha gad bu'aa kennituu. Fakkenyaf yemmun dhukkubsattu	1- Eeyyee 2- Lakki	
205	Tajaajila daumsa duraa argattee?	1- Eeyyee 2- Lakki	
206	Bakka dhaloota	1- Dhaabbata fayya 2- Mana	
207	Tajaajila daumsa booda	1- Eeyyee 2- Lakki	
208	Baayina ijoollee		
209	Mucaan ken meeqaffa		
Kutaa 3: Galii fi baasii fayyaa kan baatii			
301	Galii maatii ji'a-ji'an		
302	Galii argattan keessaa ji'a-ji'an fayyaaf ni kuufattuu?	1. Eyyee 2. lakki →	304
303	Gaaffii 8ffaa eyyee yoo ta'e, meeqa kuustu ji'an?	→	401
304	Gaaffii 8ffaa lakki yoo ta'e, maaliif kuusuu dhabdan	1. Tajaajila fayya tolaa waan qabnuuf Gandarra → 2. Qarshiin argannuu gahaa miti 3. Amalee quussana 4. Barbaachisaa miiti 5. Kan biraa (ibsi) _____	401
305	Yemmuu mucaan isin jalaa dhukkuffattu (akka tasaa) maalgootuu?	1. Manumatti qoricha aadaatiin 2. Amantiidhaan (kadhannaa) 3. Qarshi liqeeffannee geessina 4. Haga itticimutti ilaalla 5. Tajaajila rakasaa barbaanna 6. Kan biraa (ibsi) : _____	
Kutaa 4: beekumsa mallettoolee balaa(dhukkuboota cimaa)			
401	Mucaan dhukkubsate/tte beeka (beektii)	1. Eeyyee 2. Lakkii	
402	Dhukkubsachuu mucaa maaliin beekte?	1. Dhaqaa gubaa 2. Dhugu fi nyaachuun waan dhabdeef 3. Hargansiisa 4. Afura baafachuu dadhabe 5. Dadhabii qaamaa fi mugsiisu 6. Qaami dilalla'ee 7. Oldeebisa (balaqqamsisa) 8. Garaa kaasaa 9. Kuffisee hoomicha afaaniin baase 10. Kan biraa (ibsi)	
403	Waa'ee mallattoolee kanaa akkamiin beektee?	1. Dhaabata fayyarraa barnoota argannee 2. Mass-midiyaarraa 3. Hojjeettota kellaa fayyarraa 4. Muuxannoohaadhotii biraarraa argadhaan 5. Muuxannoo mucaa duraa irraa argameen 6. Kan biraa (ibsi): _____	

Kutaa 5: Amala fayyaaf yaala barbaaduu			
501	Yemmuu mallattoolee armaan olii keessa tokko argitan, mucaa dhukkubsateef maal gootani?	1. Hamma fooyya'estti eegae 2. Mana yaalaa dhuunfaatti geessine 3. Mana yaalaa mootumaatti geessine 4. Qoricha farmasiidhaan bitne 5. Qoricha aadaan manumatti yaalle 6. Namoota aadaa fayyisan haasofsisnee 7. Gara mana amantatti geesine 8. Kan biraa (ibsi): _____	
502	Yaalii qorichaan alaa erga gootaniitii booda daa'ima keessa gara dhaabbata fayyaatti geessitanii?	1. Eyyee 2. lakki	
503	Utuu mana yaalaa hingeessin guyyaa meeqa turtan	1. Guyyaa 1 2. Guyyaa 2 3. Guyyaa 3 4. Kan biraa (ibsi)	
504	Otuu mana yaalaa hin geessin maalif guyyaa sadii ol turtan	1. Manni yaalaa fagoo waan ta'eef 2. Itti foyyaa'a jenneeti 3. Qarshii gahaa waan hin qabneef 4. Tajaajila geejjibaa waan dhabneefi 5. Abban warra koo akkan geesuf waan naf hin eeyyamneef 6. Waan itti hin ciminiif 7. Mallattoon irratti argame kan mucaa hangafaa walin wal fakkaata Kan biraa (ibsi)	

Annex VII: Declaration

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in this or any other university, and all sources of materials used for this thesis have been fully acknowledged.

Name of the student_____

Date _____ Signature _____

Approval of the advisor:

This thesis has been submitted with my approval as University advisor.

Name of the advisor: _____

Date _____ Signature _____