



COLLEGE OF HEALTH SCIENCE

DEPARTMENT OF NURSING

MOTHERS' CARE-SEEKING BEHAVIOR FOR COMMON
CHILDHOOD ILLNESSES AND ITS PREDICTORS AT TULO
DISTRICT, WEST HAREREGHE, ETHIOPIA, 2024

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ABSTRACT

Background: Healthcare seeking behaviour is a sequence of corrective actions taken to address perceived ill-health in order to find appropriate treatment. Even though appropriate healthcare-seeking behaviour can reduce morbidity and mortality in children under-five age from preventable and treatable diseases, it has become a significant public health issue in developing countries like Ethiopia. Despite being a public health issue, there is a limited study on healthcare-seeking behaviour among caregivers of under-five children during illnesses in my study area. **Objective:** To assess prevalence and its predictors of healthcare seeking behaviour for common childhood illnesses among mothers/caregivers with under five children in Tulo district, West Harerghe Zone, East Ethiopia, 2024.

Methods: A community-based cross-sectional study conducted from May 8 to June 23, 2024, among urban and rural participants. Multistage stage sampling technique was employed with a total of 634 participants by structured questionnaire using face-to-face interviews via Kobo Toolbox and SPSS version 27 for data analysis. Bivariate and multivariate logistic regression analyses were done to assess the association between caregivers' healthcare seeking behaviour and independent variables. Finally, odds ratios with 95% confidence interval were used to measure the strength of association and statistical significance was set at $p\text{-value} < 0.05$.

Result: A total of 618 participants with a response rate of 97.5% were participated in the study. The overall prevalence of health care seeking behaviour for common childhood illness was 72.2% (95% CI: 66.4%-78%). Moreover, caregivers' age from 15-19year (AOR=4.433; 95%CI: 1.431-13.731) and 25-29year(AOR=2.841;95%CI:1.073-7.518), educational status (AOR=0.185; 95%CI: 0.043, 0.801), and perceived severity of illnesses (AOR=2.613; 95%CI: 1.186, 5.757) were predictors of health seeking behaviour for common childhood illnesses

Conclusion: The prevalence of health care seeking behaviour for common childhood illnesses in the study area was higher than in some other parts of Ethiopia. Age and educational status of mothers/caregivers, and perceived illness severity were factors influencing this behaviour. Therefore, providing continuous health education and promotion of health strategies to strengthen caregivers' healthcare seeking behaviour are very important. **Keywords:** Caregivers, Common Childhood Illness, Ethiopia, Health Care Seeking Behaviour, Under Five Children.

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Acronyms and Abbreviation

AOR	Adjusted Odd Ratio
ARI	Acute Respiratory Infection
Ass't Prof	Assistant Professor
BSc	Bachelor of Science
CI	Confidence Interval
DHS	Demographic and Health Surveys
ETB	Ethiopian Birr
FMOH	Federal Ministry of Health
HCSB	Health Care Seeking Behaviour
HH	Household
MSc	Master of Science
OR	Odd Ratio
SDG	Sustainable Development Goals
SPSS	Statistical Package for Social Sciences
SRS	Simple Random Sampling
SNNP	Southern nation-nationalities and people

CHAPTER ONE: INTRODUCTION

1.1 Background of study

Healthcare seeking behaviour(HCSB) is refers to a series of corrective steps taken in response to perceived health issues and a complex, dynamic, and multidimensional process which is influenced by interactions between the individual, household and community within the boundaries of existing factors such as affordability, availability, and accessibility of healthcare service (Chopra *et al.*, 2013; Duru *et al.*, 2017). It also refers to the action taken by a mother or caregiver who believes her child is showing signs and symptoms of a childhood illnesses. This action involves seeking appropriate treatment, which ultimately reduces the severity of the illness and the risk of death(Bahrami *et al.*, 2014).

Globally, a significant section of the population in developing nations is thought to have relied on traditional medicine prior to the introduction of modern healthcare facilities to meet their medical needs(IARC, 2002).In Africa, while at least 80% of people still commonly utilize traditional medicine and religious health services as their primary means of seeking healthcare, only about 20% of the population uses modern medicine(Duru *et al.*, 2017; Shewamene, Dune and Smith, 2020). Inability to seek healthcare or delay in proper care of mothers in modern health facilities is a major cause of under-five death of children all over the world, especially in Sub-Saharan Africa (Noordam *et al.*, 2015).

The magnitude of a mother's healthcare-seeking behaviour for their childhood illness is different through countries and its regions (Fissehaye *et al.*, 2018; Abegaz *et al.*, 2019; Asefa *et al.*, 2020; Bellete and Boke, 2021; Yaya *et al.*, 2021; Zenebe *et al.*, 2022b). In Sub-Saharan African countries, almost 85% of caregivers sought healthcare for childhood illnesses, with the highest and lowest prevalence in Gabon (75.0%) and Zambia (92.6%), respectively(Ahinkorah *et al.*, 2021). In Ethiopia, magnitude of mothers' care-seeking behavior for childhood illnesses were ranging from 27.2% to 90.6%(Adane *et al.*, 2017; Dagnew *et al.*, 2018; Abegaz *et al.*, 2019).Most of developing countries like Ethiopia, the practice of healthcare seeking for children is mostly dependent on maternal health care seeking behaviour. As a result, the low level of mothers' health care seeking behaviour and delaying to seek appropriate healthcare for their under-five children having childhood

illnesses result in increment of complication and mortality of children (Demissie *et al.*, 2014; Abate *et al.*, 2020; Addisu *et al.*, 2020; Shewamene *et al.*, 2020).

One of the primary objectives of the Sustainable Development Goals (SDG) is reducing child mortality, which is a worldwide health priority. The UN has chosen to achieve global SDG target 3.2 by 2030, which relates to eliminating preventable diseases and bringing down neonatal death rates from those illnesses to as low as 12 deaths per 1000 live births and child mortality rates from those diseases in children under five to as low as 25 deaths per 1000 live births (UNICEF, 2018). And also Ethiopia has developed different strategic plan to improve and success the healthcare service seeking behaviours of her population to overcome preventable and treatable childhood illnesses like pneumonia, malaria, tuberculosis, measles, diarrhoea and HIV/AIDS through different methods (FMoH, 2015; Federal ministry of health, 2016; Initiative, Malaria Operational, Malaria Fy, 2022). Until now, there has been a low rate of caregivers seeking treatment for childhood illnesses at health facilities (UNICEF, 2023). Therefore, this study will be aimed to assess the prevalence of care-seeking behaviour for common childhood illnesses and its predictors among mothers/caregivers of under-five children in the study area.

1.2 Statement of Problem

Globally, an estimated 4.9 million under-five children died from easily preventable and treatable diseases in 2022(UNIGME, 2024).This interprets into 13,611under-five children died per day. The most common cause of global under-five death of children are prematurity, lower respiratory infections, birth asphyxia/trauma, malaria, & diarrhoea (Villavicencio *et al.*, 2024).

Sub-Saharan Africa remain a region of highest mortality of under-five children, which accounted for 2.8 million (57%) (UNIGME, 2024). Even though the notable progress that has been made, Ethiopian under-five children mortality rate remains high with 55 deaths for every 1000 live births(EPHI, 2019). The main infectious diseases that caused the greatest number of deaths were malaria(26%), pneumonia(21%), and diarrheal disease (25%) (Johnson *et al.*, 2010).In Ethiopia, caregivers of children under five who had childhood illnesses showed poor healthcare seeking behaviour.

The most common illnesses were diarrhoea (20%), pneumonia(19%), acute respiratory infections(15%),and acute febrile illnesses 7% (Abegaz *et al.*, 2019). Common childhood illnesses are communicable diseases, which account for a significant portion of the morbidity and mortality of children under five worldwide, especially in low and middle-income nations. Among the most common causes of paediatric illnesses are acute respiratory infections, febrile illnesses and diarrheal diseases(Kebede, 2020).

Different literature conducted at elsewhere identified that mother's care-seeking behaviour for common childhood illnesses were influenced by child's age, child's birth order, mother's education, distance to nearest healthcare facility, wealth index, place of residence and delivery, and region of residence, mothers/caregivers, family size, previous experience of similar illnesses and under-five child death, number of Antenatal care follow-ups, perceived severity of childhood illness, using traditional medicine and perceived guiding symptoms of severity(Wambui *et al.*, 2018; Khalil *et al.*, 2019; Mishra *et al.*, 2019; Kebede, 2020; Lungu *et al.*, 2020; Merkeb Alamneh *et al.*, 2022; Girma Worku1 * and Deselegn Tesema2, 2022; Zenebe *et al.*, 2022b; Tawfiq *et al.*, 2023; Yeheyis *et al.*, 2023), which needs making a high efforts to overcome this issue unless it leads high morbidity and mortality in children because of their low immunity to fight against the diseases (Pediatric Experts, no date).

Ethiopia has been reducing under-five children mortality through various of programs, including immunization campaigns and illness prevention efforts, but high rates of death for children under five still exist, especially in disadvantaged areas(UNIGME, 2024) (Fikre Bojola *et al.*, 2018).Even though many children still have been dying before reaching medical facilities due to delayed and inappropriate healthcare seeking, timely and appropriate healthcare-seeking behaviour of caregivers does play a significant role in reducing morbidity and mortality among under-five children(Asekun-Olarinmoye Esther and Fawole, 2014). According to estimates from the World Health Organization, caregivers who seek appropriate and timely care could reduce child mortality by 20% (Bahrami *et al.*, 2014).

In 2023, 22.5% of children under five had common childhood illnesses including fever, diarrhoea, and ARI, as a result of caregivers' inappropriate care-seeking behaviour(24), and there were 26,398 cholera cases with 362 deaths, 20,782 measles cases with 159 deaths, and 2.9 million malaria cases which was around 50% of cases were from Oromia Regional States followed by Amhara and Southwest Ethiopia(Region, 2024), secondary to poor health care service due to COVID 19, humanitarian hostilities, displacement, flood, and drought, that exposing the communities for many challenges like economic, social, political, and developmental crisis(Report, 2023, 2024). So that, to address the morbidity and mortality burdens of those diseases, the responsible government bodies are working in collaboration with many other organization through improving healthcare accessibility, enhancing healthcare education for caregivers, promoting early intervention, providing medicine, preventive drug like vaccine, and anti-malaria supplies as well as vector control (FMoH Ethiopia, 2022; Report, 2023, 2024; UNICEF, 2024).

Despite studies done in various regions of Ethiopia on mothers/caregivers' responses to common childhood illnesses, there remains a lack of data on this subject in Tulo District, as it has not been studied. So, assessing the prevalence of care-seeking behaviour for common childhood illnesses and its predictors are essential steps in developing targeted strategies to enhance children's health in the study area.

1.3. Significance of Study

The results of this study will provide essential information for various stakeholders in the district. The district policy makers and planners will utilize these findings to create targeted interventions and policies that enhance healthcare accessibility and utilization, ensuring that all under-five children in the district receive timely and appropriate medical care. Community leaders will gain awareness on importance of seeking early medical attention, thereby empowering mothers/caregivers to make informed decisions and advocate for their children's health. Health professionals will use the insights to raise awareness for caregivers and strengthen community engagement strategies to enhance health care quality of children. Non-governmental organizations will formulate community networking programs and allocate resources to address issues identified by the study, thereby improving healthcare-seeking behavior and child health outcomes. Additionally, the study will serve as a baseline resource for future researchers aiming to understand and manage childhood illnesses in similar settings.

CHAPTER TWO: LITERATURE REVIEW

2.1. Prevalence of Health Care Seeking Behaviour

A community-based cross-sectional study conducted in Nepal (n=387) in 2018 found that 84.8% caregivers sought care of ill children at health facility (Tiwari *et al.*, 2022). Another cross-sectional study in Indonesia from 2002-2017 evidence of Indonesian DHS analysis shown that the prevalence of HCSB of mothers/caregivers at health facilities was 66.45%(n=16,300) (Khasanah *et al.*, 2023). Study finding in India (n=6198) revealed that prevalence of treatment sought at health facility for acute respiratory infections was 56.1% (Varghese and Muhammad, 2023), while in in Afghanistan was 39.1% (Tawfiq *et al.*, 2023).

Study done from secondary data of DHS of 24 sub-Saharan African countries (2013-2018) revealed that 45%(n=44,627) of caregivers of sought treatment for symptoms of child illnesses (Yaya *et al.*, 2021), while studies done in 36 sub Saharan African countries showed that 64.9% of mothers sought care at health facility (Tesema and Seifu, 2023). Study done in 11 east African DHS of 2012-2020 period also revealed that 64.4% (n=8,927) mothers of children with symptoms of ARI sought care at health facility (Aragaw *et al.*, 2024).

Community based study done in Zambia in 2021 showed that 74.4% (n=2,132) of mothers sought treatment at health facility for children with symptoms of fever and ARI (Chirwa *et al.*, 2023), whereas survey study analysis conducted in Chad revealed that 79.6% (n=4592) of mothers were sought health care for child illness (Budu *et al.*, 2021). Another survey study done in Nigeria in 2018 also reported that 71.1% (n=6779) caregivers were sought care for symptoms of their child illness (Adeoti IG and Cavallaro FL, 2022).

A systematic review and meta-analysis conducted in Ethiopia between 2008 and 2019, comprising 14 studies, found that 50.24% of mothers/caregivers sought care at health facilities for child illnesses (Merkeb Alamneh *et al.*, 2022). The prevalence in the Oromia regional states was reported to be 36.56% in this study. Another systematic review and meta-analysis study conducted in Ethiopia in 2021 showed that the overall prevalence of caregivers' HCSB for childhood diarrhoea, ARI, and fever was 60.33% (Zenebe *et al.*, 2022). Additionally, a survey study based on data analysis from the

Ethiopian DHS(2016) found that among 1354 febrile children, 36.26% of caregivers sought treatment for their children (Liyew *et al.*, 2022).

A community-based cross-sectional study done in Hawasa city, Ethiopia in 2021 found that 70.2% (n=257) of mothers/caregivers sought care at health facilities for their child's illnesses (Yeheyis *et al.*, 2023), whereas in Amara region Aneded district 48.8%, and Efratena Gidim district 59.1% were sought care for their child illness (Simieneh *et al.*, 2019; Getahun *et al.*, 2022). Other studies done in Addis Ababa showed that 69.5% and 70.8% of caregivers were sought treatment for symptoms of child illness (Adane *et al.*, 2017; Bellete and Boke, 2021). Study finding in Tigray region revealed 76.2% and 72.5 % caregivers were sought care for their children with common illness (Fissehaye *et al.*, 2018; Weldesamuel *et al.*, 2019).

An institutional based study done in Nekemte city, Oromia region revealed that 95.1% caregivers sought care for child's illness at health facility (Fetensa *et al.*, 2019). Similarly, community-based cross-sectional study done in Jeldu district 74.6% (n=314) and Kimbibit district 87.5% of mothers sought care at health facilities for their child's illness (Kolola *et al.*, 2016; Asrat *et al.*, 2021).

2.2. Factors Associated With Health Care Seeking Behaviour

2.2.1. Socio- Demographic Related Factors

As survey study conducted in Indonesia from 2002-2017 identified that age of child, birth order of child, education of mother and place of residence were significantly associated with mothers' care-seeking behaviour for childhood illness (Khasanah *et al.*, 2023). Study done in Nepal, 2018 revealed that Secondary education (AOR=0.357) and involvement in service as an occupation (AOR=3.533) were significantly associated with health care seeking behavior for children having fever (Tiwari *et al.*, 2022). In contrary to study conducted in Nepal regarding educational level of mothers/caregivers, study finding from Yemen showed that secondary educational level associated significantly with HCSB for common childhood illnesses (AOR= 5.85) (Webair and Bin-Gouth, 2013). Study conducted in Bangladesh, 2014 identified that age and sex of the children, wealth index, mothers' and fathers' education and household lifestyle were significantly associated with mother's healthcare seeking behavior regarding ARI among children (Sultana *et al.*, 2019).

As finding from data analysis of 24 Sub-Saharan African countries from 2013-2018 identified that sex of child, educational status, working load, exposure to mass media, size of children, & income

status were significantly associated with mothers' health care service utilization for childhood illnesses (Yaya et al., 2021). A systematic review and meta-analysis done in Ethiopia, 2021 showed that residence (AOR=3.06) and wealth index (AOR=2.18) were significant factors associated with mothers health care seeking for childhood illness (Zenebe et al., 2022a). A community-based study done in Hawasa City, Ethiopia, 2021 showed that Number of Antenatal care follow up (AOR=2.106), urban residence (AOR=2.688), and four or above birth order (AOR=5.501) were significantly associated with modern HCSB of mothers for childhood illness (Yeheyis et al., 2023).

Study done in Ensaro district of Amara region revealed that age of caregivers significantly associated with HCSB (AOR=2.128 and 1.857) (Sisay, Endalew and Hadgu, 2016). An institutional-based study done in Yem special woreda, Ethiopia 2023, among 333 caregivers of under-five children having common childhood illnesses found that having Child ≥ 12 months (AOR=1.99) and being rural residence (AOR=2.41) were factors associated with delayed healthcare seeking behaviour (Hunde et al., 2024). A community-based cross-sectional study done in Aneded district, East Gojjam, 2016 identified that child's age ≥ 24 months (AOR=0.63) was statistically significant association with HCSB for childhood illnesses (Muluye Molla Simieneh, 2021).

2.2.2. Institutional/health facility Related Factors

Study done in Nepal, 2018 revealed that distance to reach nearest health facility (AOR=0.957) was found to be significantly associated with health care seeking behavior for children having fever (Tiwari et al., 2022a). Study conducted in Chad revealed that mothers who reported that distance to the health facility was a barrier were 0.79 times less likely to seek healthcare for childhood illnesses compared to those who not faced geographical barrier (Budu et al., 2021). As Study done in Indonesia from 2002–2017 data analysed report identified, the odds of distance to the nearest healthcare facility was not a big issue which were 1.34 times more likely to seek healthcare for their children (Khasanah et al., 2023).

Study conducted in East African countries from data analysis of 2012-2020 reported that distance to health facility was not a big problem (AOR=1.11) and Place of delivery at health facilities (AOR=1.77) were factors associated to health institution (Chilot et al., 2022). Study done in Ethiopia from data analysis of EDHS (2016) identified that mothers who delivered at health institution were 1.44 times more likely to seek healthcare for their ill child compared to those who delivered at home (Liyew et al., 2022), whereas study done in Ethiopia from data analysis identified

that mothers delivered at health institution were 2.24 times more likely to sought health care for their children with ARI symptom compared to those delivered at home (Aragaw *et al.*, 2024).

2.2.3. Individual Related Factors

Study done in Nepal, 2018 revealed that perceived moderate severity of illness (AOR=7.612) and perceived severe severity(AOR=15.563) were found to be significantly associated with HCSB for children with fever (Tiwari *et al.*, 2022a).Systematic review and meta-analysis done in Ethiopia,2021 revealed that the main reason of mothers or caregivers not to sought health care for childhood illness were significantly associated with perceived severity of illness(AOR=2.7) and knowledge of the illness(AOR=1.95)(Zenebe *et al.*, 2022a). Another review and meta-analysis study done in Ethiopia identified that mothers who had awareness about common childhood illnesses were 2.06 times more likely to seek appropriate health care than those who have no awareness (Merkeb Alamneh *et al.*, 2022).

Another study conducted in Ethiopia from data analysis of EDHS (2016) revealed that having a child with diarrhoea, cough, and short rapid breathing were significantly associated with treatment-seeking behaviour of caregivers who had under-five febrile children (Liyew *et al.*, 2022). Study done in Yirga Chefe district, Ethiopia showed that caregivers who perceived severity of child illness as severe were 5.19 times more likely to seek treatment compared to those perceived illness was mild (Obsie, 2023). Study done in Aneded district, Ethiopia,2016 revealed that mothers having awareness of childhood illnesses (AOR=3.8), perceived importance of early treatment(AOR=3.5), and illness not being perceived as severe(AOR=0.17) were factors associated with mothers HSCB during their child illnesses (Simieneh *et al.*, 2019).

Study done in Woldia town, Ethiopia revealed that perceived severity of illness (AOR=4.24), exposure to mass media (AOR=5.56), and type of symptom reported (AOR=2.49) were more likely to sought health care for their children compared to those one (Demelash *et al.*, 2020). Study done in Hawasa City, Ethiopia showed that perceived severity of illness (AOR=2.832) significantly associated with modern health-seeking behaviour of mothers for childhood illnesses (Yeheyis *et al.*, 2023). Study done in Ethiopia using the 2016 DHS revealed that caregivers who have been exposed to media (AOR=2.49) was more likely to sought health care for their children with ARI symptoms compared to non-media exposed mother (Aragaw *et al.*, 2024).

Study done in Yem special woreda, Ethiopia 2023, among 333 caregivers of under-five children having common childhood illness found that traditional treatment(AOR=2.98), self-medication at home first (AOR=2.73), and perceiving illness as mild (AOR=2.64) were factors associated with delayed HCSB (Hunde *et al.*, 2024).Study done in Aneded district, Amhara region identified that decision-making to visit a health facility (AOR=2.71), perceived severe illness (AOR=9.29),and perceived moderate illnesses (AOR=3.20)were factors having significant association with HCSB for childhood illnesses (Simieneh *et al.*, 2021).

Another study done in different parts of Ethiopia like Oromia region(AOR=3.20), Tigray (AOR=2), and Addis Ababa (AOR=2 & AOR=3.35) were showed that caregivers of children with severe illnesses were more likely to seek health care services than those whose children had mild or not severe illnesses (Kolola *et al.*, 2016; Abegaz *et al.*, 2019; Weldesamuel *et al.*, 2019; Bellete and Boke, 2021)

2.3. Conceptual Framework

The following arrows with green colour show the presence of association between the two independent variables. Arrows with blue colour show the association between independent variables and the outcome variable. These all independent variables in conceptual framework were developed from the reviewed literatures (Kolola et al., 2016; Begashaw and Tesfaye, 2016; Dagneu et al., 2018; Kebede, 2018; EPHI, 2019; Woldeamanuel, 2020; Asefa *et al.*, 2020; Demelash et al., 2020; Girma *et al.*, 2020; Merkeb Alamneh et al., 2022; Aragaw et al., 2024; Hunde *et al.*, 2024).**Error!**

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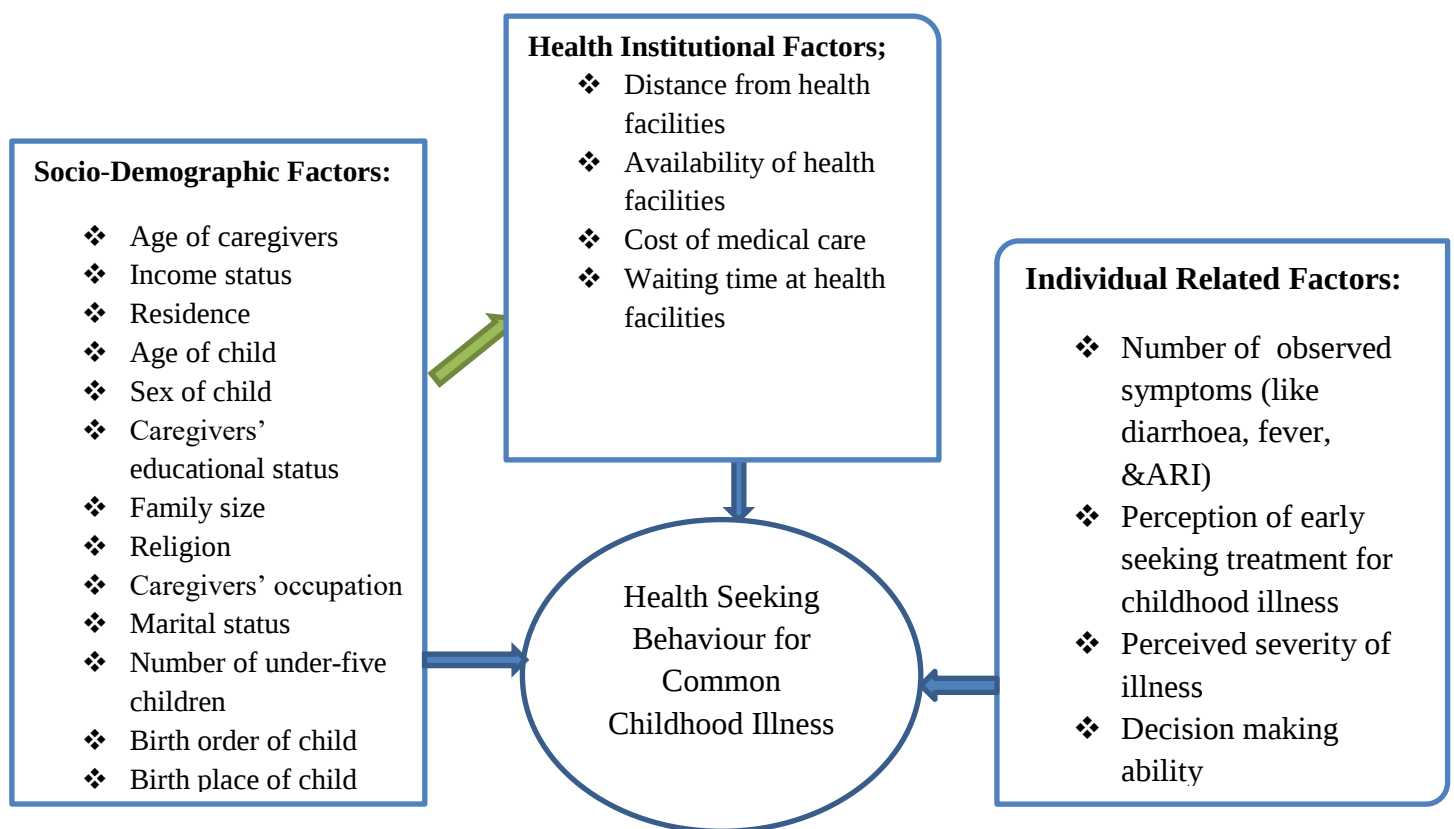


Figure 1 Show The Conceptual Framework of Mothers/Caregiver's Care-Seeking Behaviour for Common Childhood Illnesses.

CHAPTER THREE: OBJECTIVES OF STUDY

3.1 General objective

To assess the prevalence of health care seeking behaviour for common childhood illness and associated factors among mothers/caregivers of under-five children in Tulo District, West Harerghe Zone, Oromia, Eastern Ethiopia, 2024.

3.2 specific objectives

To determine the prevalence of health care seeking behaviours for common childhood illnesses among mothers/caregivers of under-five children in Tulo District, West Harerghe Zone, Oromia, Eastern Ethiopia, 2024.

To identify associated factors of health seeking behaviours for common childhood illnesses among mothers/caregivers with under-five children in Tulo District, West Harerghe Zone, Oromia, Eastern Ethiopia, 2024.

CHAPTER FOUR: METHODS AND MATERIALS

4.1. Study Area

This study was conducted in Tulo District, West Harerghe, Oromia, Eastern part of Ethiopia. The total kebele of the district is 34 (30 rural and 4 urban kebeles). Hirna town is capital of the Tulo district which situated around 375 km from Addis Ababa, capital city of Ethiopia. Tulo district is surrounded by Doba district to the north, East Harerghe Zone to the East, Shanan Dugo district to the South and Chiro town (West Harerghe Zone) area to the West. According to information obtained from Tulo Woreda Health Office plan (2016 E.C), the total population of the district is two hundreds thirty six thousand and one hundred sixteen (**236,116**). Among this total population; under-five children (**38,796**), estimated pregnant women (**8,193**) and women of child bearing age (**52,253**). The climate condition of the district was midland. The district has one primary public hospital, 7 Health Centers, 31 Health Posts, 8 private clinic and 7 drug stores.

4.2 Study period

The study was conducted from May, 8/2024 to June, 23/2024.

4.3 Study design

Community based cross-sectional study was conducted.

4.4 Population

4.4.1 Source Population

All mothers or Caregivers of under-five children living in Tulo district, Oromia, Ethiopia.

4.4.2 Study Population

Mothers or caregivers of under-five children who were living in selected kebeles of Tulo district during study period.

4.4.3. Study unit

Mothers or caregivers with under-five age children who were selected for interview

4.5. Inclusion and exclusion criteria

4.5.1. Inclusion criteria

Mothers/caregivers of under-five children living at least six months in selected kebeles during period of study.

4.5.2 Exclusion criteria

Mothers/caregivers who had medical problems (such as: hearing, mental disorder, and other medical case with difficulty of communication) during period of data collections.

4.6. Sample size determination

4.6.1 Sample Size for Objective One

Sample size calculated using single population proportion formula with assumptions of 95% confidence interval ($z_{\alpha/2}=1.96$), 5% margin of error, 1.5 design effect, and previous proportion ($P=48.8\%$) of mothers sought health care for their childhood illnesses, which was taken from previous study done in Aneded District, Amhara region (Simieneh *et al.*, 2019). Then, the sample size calculated as follows:

$$n = \frac{g*(z_{\alpha/2})^2*p*(1-p)}{(d)^2}$$

Where: n =sample size g =design effect (1.5)

$Z_{\alpha/2}$ =significance level (1.96) d =margin of error (.005)

p =proportion of mothers sought healthcare for childhood illnesses (0.488).

$1-p=q$ = proportion of mothers not sought healthcare for childhood illness (0.512). So, sample size become: $n = \frac{1.5*(1.96)^2*(0.488)*(0.512)}{(0.05)^2} = 576$. By considering 10% of non-response rate which is $576 \times 0.1 = 57.6 \approx 58$, the final sample size of objective one become $n=634$.

4.6.2 Sample Size for Objective Two

The sample size was calculated utilizing the two-population proportion formula, taking into account three related variables regarding mothers' healthcare-seeking behavior for childhood illnesses as identified in a previous study. The calculation was performed using Epi-Info software version 7.2.6.0 (STATCALC) with a two-sided confidence level ratio of one (unexposed to exposed=1)

Table 1; Sample size determination for factors associated with health care seeking behaviors for common childhood illness in Tulo District West Harerghe Zone, Oromia Regional State, East Ethiopia, 2024.

Factors	References	% of non-exposed	% of exposed	CI	Power	Ratio	Sample size	10%non-response rate	Total sample size
Perceived severity of illness (severe)	(Yeheyis <i>et al.</i> , 2023)	34.8% (severe & not sought care)	51.1%(severe & sought care)	95%	80%	1:1	312	31	343
Number of symptoms two or more	(Kolola <i>et al.</i> , 2016)	15.2%(two/more & not sought care)	58.3%(two/more & sought care)	95%	80%	1:1	46	5	51
Exposure to Media	(Demelash <i>et al.</i> , 2020)	9%(not exposed, but sought care)	91%(exposed and sought care)	95%	80%	1:1	14	1	15

Finally, after evaluating sample size for objective one and two, the largest sample size was taken for study is **n=634**.

4.6. Sampling Technique and Procedure

Multistage sampling technique was employed to choose study participants. The sample size proportionally allocated for each kebeles based on number of mothers/caregivers who had under-five children. The district was divided into urban (5 kebeles) and rural (29 kebeles) settings. Among total 34 kebeles in Tulo district, 30% (11 kebeles=9 rural and 2 urban) were randomly selected using lottery method from list of two setting. At least 50% of Gots or Ketenas (Got or Ketena is the smallest unit in kebele administrative) within those kebeles were chosen through simple random sampling. The sample included 149 participants from urban areas and 485 from rural areas. Using cluster sampling method, households were visited to identify those with under-five children, and if more than one eligible mother or child was present, one was randomly selected (Asrat *et al.*, 2021). However, mothers/caregivers who refuse to participate in the study were considered as non-respondents. [Figure2](#)

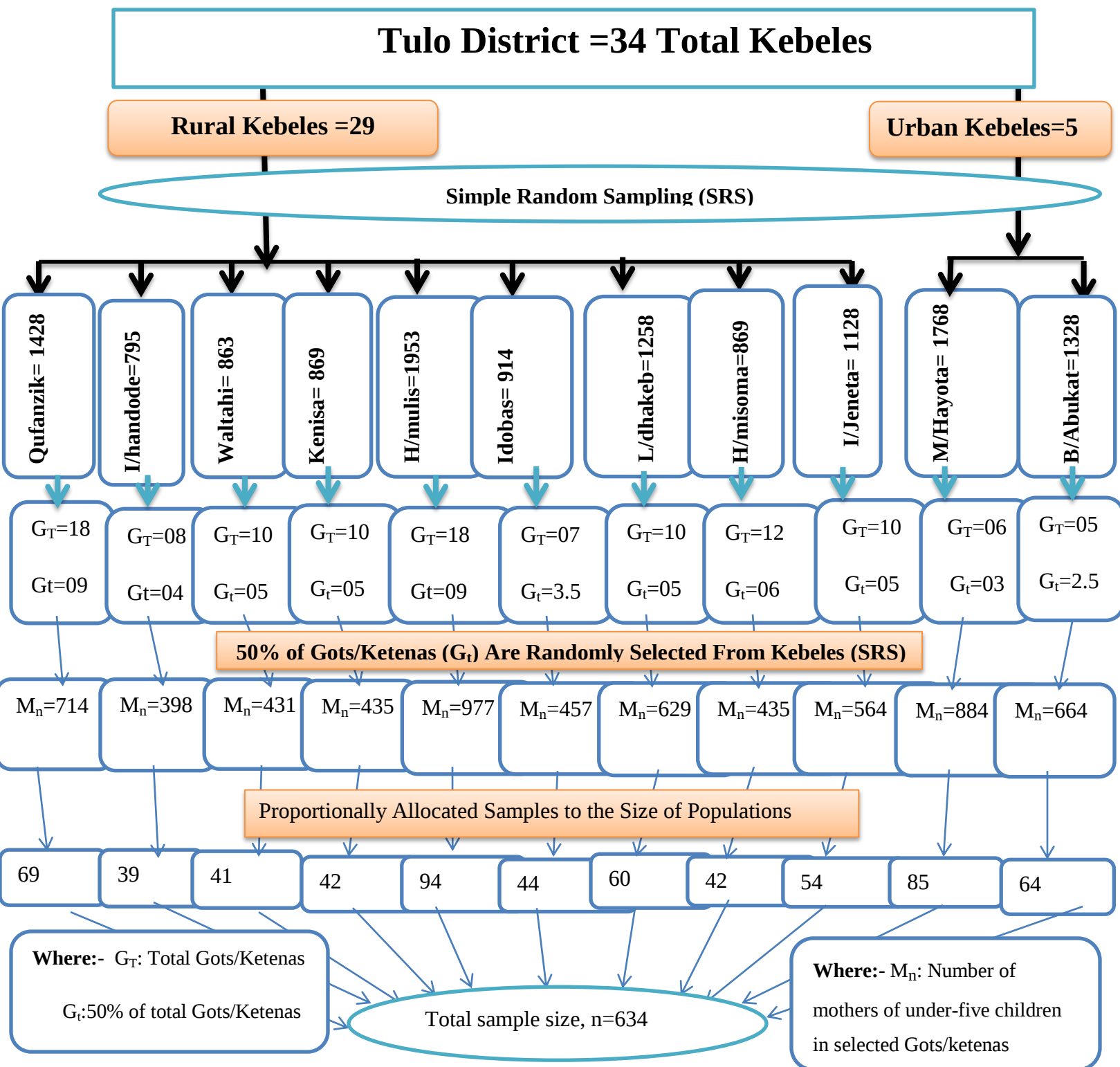


Figure2: Schematic presentation of sampling procedure, in Tulo District, West Harerghe Zone, Oromia Regional State, East Ethiopia from May 08/2024 to June 23/2024

4.7. Data Collection Procedure (Tools, Technique and Personnel)

The questionnaire was initially developed in English and then translated into Afaan Oromo. The questionnaire, comprising a total of 46 questions, which were based on various literature sources (24,42,44,58–60) and covers socio-demographic factors (17 questions), health institutional factors (5 questions), health-seeking behaviours of mothers or caregivers (16), as well as mothers/caregivers' perception of HCSB for common childhood illnesses and causes of illnesses (8 questions).. A pre-test was conducted on 5% of the total sample size in one kebele of other woreda. Training was given for supervisors and data collectors on study objectives and kobo toolbox. Study participants were selected using a multistage sampling technique. Data was collected through face-to-face interviews using the Kobo collect toolbox. The data collection team were four members: two Bachelor of Science nurses, two diploma nurses, and one supervisor with a health officer qualification.

4.8. Study Variables

4.8.1. Dependent Variables

Health care seeking behaviours for common childhood illnesses.

4.8.2. Independent Variables

- ❖ **Socio-demographic characteristics:** mothers'/caregivers' age, income status, residence, age of child, sex of child, birth place, mother's/caregivers educational status, family size, religion, mother's occupation, marital status, Childs' place of delivery, and number of under-five children
- ❖ **Individual related factors:** number of symptoms, Perception on need of early treatment seeking for childhood illness, and perceived severity of illness, decision making and Birth order of child
- ❖ **Health institutional related factors:** - distance from health institution, availability of health facility

4.9. Operational Definitions

Healthcare-seeking behaviour is defined as caregivers' response for recent sign and symptoms of illness to reduce the severity, complications, or even death and if caregivers were sought treatment for child's illness, it is considered as having health care seeking behaviour.(Getahun *et al.*, 2022) (Adane *et al.*, 2017)

Common childhood illnesses: in this study common childhood illnesses are acute respiratory infections, diarrhea and fever.

Acute Respiratory Infection: is when mothers or caregivers report only cough and coughs with rapid/difficulty breathing occurring within three months period.

Difficult Breathing: is any abnormal status of breathing (fast, noisy, or interrupted breathing) of the sick children.

Fever: When mother's/caregiver's reported history of hot body temperature (i.e. by touching the child's body and feeling body hotness) than normal body temperature for any sick child.

Perceived severity of illness: Caregivers' subjective assessment of child's level of illnesses as mild, moderate and severe illness (Simieneh *et al.*, 2021).

Caregivers: are adult male or female, but mainly female who is responsible for the daily care of children below five years. They include mother, father, grand- mother, aunts, Childs' sister or brother

Household: a group of related people or family living together.

4.10. Data Quality Assurance

Before the actual data collection begins, the questionnaires were pre-tested on 5% of the sample size (n=32 participants) from one kebele outside study area to ensure their reliability and feasibility. This pre-testing phase was not included in the main data analysis. The questionnaires, initially prepared in English, were translated into the local language Afan-Oromo for interview study participants, and then back-translated into English. Four nurses trained as data collectors and one supervisor with a health officer qualification were given three days of training on data collection procedures and kobo toolbox. The supervisor was evaluated daily activities like hold brief meetings with data collectors, review all collected data, and then sent it to the researchers. The principal investigator checked the collected data daily and provided feedback to the supervisor on any errors, and ensures the quality of the collected data.

4.11. Data Processing and Analysis

The data collected were exported from Kobo Toolbox to Excel and then imported into SPSS version 27 for data analysis. Summary statistics were calculated to present the descriptive data findings. Hosmer and Lemeshow model of good fitness test was conducted and resulted with p-value=0.683. Bivariate logistic regression analysis was conducted to select candidate variables for multivariate logistic regression analysis at P-value less than 0.25. Before multivariate analyses, variance inflation factor for all candidate variables in the model was checked and the large value was equal to 3.587, which suggests that a problem of multi-collinearity was less likely. In the multivariate logistic regression analyses, variables with a p-value less than 0.05 were considered statistically significant in their association with dependent variables. The odds ratio (OR) with a 95% confidence interval (CI) was used to assess the strength and direction of the association. Finally, study results were presented through text and tables.

4.12. Ethical Consideration

Ethical approval was sought from the Institutional Review Board at Salale University (Ref.N0:266) from the College of Health Science, Department of Nursing, and the Research and Ethics Committee. A formal request for permission was sent to the Tulo Woreda administration and the Woreda Health Office to obtain their support. The Tulo Woreda Health office was actively engaged in providing the necessary assistance, while the leaders of the kebeles, manager and Health Extension Workers were played their respective roles. Prior to conducting interviews, informed

verbal consent was obtained from all participating mothers/caregivers, and their confidentiality and autonomy was strictly maintained throughout the data collection process.

4.13. Plan for dissemination of results

The final result of the study will be submitted to Salale University, College of Health Science, and Department Of Nursing. The result will also submitted to Oromia Health Bureau and Tulo District Health Office, West Harerghe Zone. Finally, it will be undergone peer review and published.

CHAPTER FIVE: RESULT

5.1 Socio-Demographic Characteristics of mothers/caregivers and child

A total of 618 mothers/caregivers were interviewed and resulting an overall response rate of 97.5%. The median age of the caregivers was 26 years with interquartile range from 21-30 years and with ages ranging from 15 to 60 year. More than half of the children, 328 (53.1%), were female and others were male. The median age of the child was 25 months with interquartile range from 12-36months and age ranging from 0 to 58 months. The estimated median of monthly income for caregivers was 3580.00 2birr with interquartile ranges from 2487.50-5000.00 birr and range of 500 to 15000 birr per month. Regarding their place of residence, 470 (76.1%) lived in rural areas, while the remainder resided in urban settings. Regarding place of delivery, most of study participants (70.1%) gave birth in health institutions. (Error! Reference source not found.)

Table 2: Socio-Demographic Characteristics of study participants in Tulo district, Ethiopia, 2024 (n=618)

Socio-demographic characteristics of caregivers and children	Category	Frequency(n=618)	Percentage (%)
Relationship with the child	Mother	590	95.5
	Others	28	4.5
Age of mother/caregiver	15-19	91	14.7
	20-24	170	27.5
	25-29	177	28.6
	30-34	79	12.8
	≥35	101	16.3
Residence	Rural	470	76.1
	Urban	148	23.9
Caregiver's marital status	Not Married	5	0.8
	Married	587	95.0
	Divorced	14	2.3
	Widowed	12	1.9
Religion of caregivers	Orthodox	170	27.5
	Protestant	15	2.4

	Muslim	428	69.3
	Catholic	5	0.8
Mother/Caregiver educational status	Unable to read & write	201	32.5
	Able to read & write	10	1.6
	Primary school	326	52.8
	Secondary school	62	10.0
	College level & above	19	3.1
Father educational status	Unable to read & write	102	16.5
	Able to read & write	21	3.4
	Primary education	253	40.9
	Secondary education	170	27.5
	College level & above	72	11.7
Mother/Caregiver occupational status	Housewife	508	82.2
	Farmer	22	3.6
	Government employment	12	1.9
	Student	13	2.1
	Merchant	63	10.2
Father occupational status	Daily worker	64	10.4
	Farmer	457	73.9
	Government employment	55	8.9
	Student	42	6.8
	Merchant	64	10.4
Family monthly income	≤1000	42	6.8
	>1000	576	93.2
Number of under-five children	One	320	51.8
	Two	233	37.7
	Three and above	65	10.5
Family size	<5	416	67.3
	≥5	202	32.7

Previous history of under-five child death	Yes	56	9.1
	No	562	90.9
Sex of selected child	Male	290	46.9
	Female	328	53.1
Age of child in month	0-11	115	18.6
	12-24	188	30.4
	25-36	165	26.7
	37-59	150	24.3
Birth order of child	First	176	28.5
	Second	112	18.1
	Third	117	18.9
	Fourth and above	213	34.5
Child's place of delivery	At health institution	443	71.7
	At home	175	28.3

Others: include sister of child, child father, aunt and grandparent

5.2. Respondents' Health Seeking Behaviour for Common Childhood Illnesses

The overall 72.2%, (95% CI: 66.4% - 78%) of respondents sought healthcare for their sick child within the past three months, while 27.8% of respondents were not sought any treatment for sick child. Among total 230 caregivers who had sick child, 166 caregivers sought medical treatments for their children. The majority of them were initially chosen health institutions 125 (75.3%) followed by self-treatment at home 19 (11.4%), traditional healers 15 (9 %), and from pharmacy 7 (4.2%).

Among caregivers who preferred to visit health institutions, health centers were the most selected source of healthcare services where treatment was chosen by 68 (54.4%) of caregivers and, 24 (19.2%) sought healthcare from hospital, 20(16%) sought care from health post, 13 (10.4%) from private clinic. Among 166 caregivers who sought treatment for their sick child, reported that time of healthcare-seeking after the onset of illnesses were within a day of symptom of disease recognized (48.8%), at 2-3 days(33.1%), at 4-7 days (13.3%), and after 7 days of disease recognized (4.8%).

Table 3: Caregivers health care seeking behaviour for common childhood illnesses in Tulo district, West Harerghe Zone, Ethiopia, 2024. (n=230)

Variables	Category	Frequency (n)	Percent (%)
Has this child been sick in the last three months?	Yes	230	37.2
	No	388	62.8
Did your child have cough within the past three months?	Yes	200	87.0
	No	30	13.0
Did your child have fast or difficulty breathing in the past three months?	Yes	27	11.7
	No	203	88.3
Did your child have fever within the past three months?	Yes	101	43.9
	No	129	56.1
Did your child have diarrhea within the past three months?	Yes	132	57.4
	No	98	42.6
Did your child have two/above two symptoms of illnesses within the past three months?	Yes	75	32.6
	No	155	67.4
Have you sought advice/treatment for symptoms of a recent illness?(n=230)	Yes	166	72.2
	No	64	27.8
Where did you first seek advice/treatment for sick child? (n=166)	Health institutions	125	75.3
	Traditional healer	15	9.0
	Self-treatment at home	19	11.4
	From pharmacy	7	4.3
Types of modern health facility visited? (n=125)	Hospital	24	19.2
	Health center	68	54.4
	Health post	20	16.0
	Private clinic	13	10.4
Main reason for seeking treatment at health facilities? (n=125) ^b	Worsened child condition	69	55.2
	Advice from other persons	92	73.6
	Proximity of health facility	58	46.4
	Fear of death	48	38.4
	Previous experience of similar disease	78	62.4

	Belief that disease will be cured at this facility	49	39.2%
	Medication cost is not expensive	2	1.6%
Time of seeking healthcare after onset of child's illness? (n=166)	Within a day	81	48.8
	At 2-3 days	55	33.1
	At 4-7 days	22	13.3
	After 7 days	8	4.8
Main reason not to sought treatment at health institutions (n=125)? ^b	Lack of money	15	23.4
	Believe that disease is cured by traditional medicine	9	14.1
	Long distance from the health facility	18	28.1
	Lack of self-decision	23	35.9
	Fear of long waiting time	10	15.6
	Illness was mild	58	90.6
	Others	15	23.4
Perception of caregivers about severity of childhood illness? (n=230)	Mild	65	28.3
	Moderate	86	37.4
	Severe	79	34.3
Ways of identifying severity of childhood illnesses (n=166)? ^b	When behavior of child changed	145	63
	When Illness continue for long time	3	1.3
	Difficulty of child to suck breast or eating food	45	19.6
	Combined symptoms of disease	37	16.1

Other: include problem of health insurance usage

Remark: ^b indicate the sum of percentages in the above table can be greater than 100%, since it is multiple responses

5.3. Mothers'/caregivers' perception regarding importance of early seeking treatment, causes of common childhood illnesses, and ways of identifying severity of illness

Table 4: Mothers'/caregivers' perception regarding importance of early seeking treatment, causes of common childhood illnesses, and ways of identifying severity of illness in Tulo district western Harerghe, Ethiopia,2024.(n=618)

Variables	Category	Frequency (n)	Percent (%)
Do you believe it is important to go to health facilities immediately when children are sick?	Yes	494	79.9
	No	124	20.1
Do you believe that a child with diarrhoea should go to health institution within one day?	Yes	448	72.5
	No	170	27.5
Do you believe that a child with difficulty of breathing should go to health institution within one day?	Yes	580	93.9
	No	38	6.1
Do you believe that a child with fever should go to health institution within one day?	Yes	469	75.9
	No	149	24.1
How do you believe severity of childhood illness is identified? ^b	When child behaviour changed	527	85.3
	Illness continue for long time	302	48.9
	Difficulty of child to suck breast or eating/drinking	609	98.5
	Combined symptoms of disease	395	63.9
Possible cause of childhood illnesses? ^b	Curse from God	50	8.1
	Micro-organisms	482	78.0
	Evil eyes	295	47.7
	Contaminated water and food	601	97.2
	Teething	510	82.5
	Shortage of food	397	64.2
Do you know about common signs of severity of childhood illnesses?	Yes	515	83.3
	No	103	16.7
Source of information regarding signs and symptoms	Health professional	449	87.2

of severity of childhood illnesses? ^b	Radio	155	30.1
	Television	54	10.5
	Family	396	76.9
	Neighbour	175	34.0
	Others	198	38.4

‘Others’: indicate previous experience, one to five women networking in community

Remark: ^b indicate the sum of percents in the above table can be greater than 100%, since it is multiple responses

5.4. Mothers’/Caregivers’ Responses Regarding Health Facilities

Table 5: Mothers’/caregivers’ responses regarding health facilities in Tulo district, Ethiopia, 2024

Variables	Category	Frequency (n)	Percent (%)
Is there the nearest modern health facility in your area?	Yes	485	78.5
	No	133	21.5
Approximately how many minutes do you walk from your home to get to health facility	Below 30 minute	349	56.5
	30-60 minute	250	40.5
	Above 60 minute	19	3.1
Which modern health facility is relatively closest to you?	Health post	307	49.7
	Health center	157	25.4
	Hospital	97	15.7
Do you think the health delivery services provided by this health facility are adequate?	Yes	535	86.6
	No	83	13.4
If answer for above is ‘No’, what were the main reason for not providing of adequate service? b	Increased cost of medication	3	3.6
	Poor health worker approach’s	17	20.5
	Lack of health professional	62	74.7
	lack of referral system	5	6.0
	Others	49	59.0

‘Others’ : include lack of medication, lack of laboratory services, and long waiting time

Remark: ^b indicate the sum of percents in the above table can be greater than 100%, since it is multiple responses

5.5. Factors affecting mothers'/caregivers' healthcare seeking behaviours for common childhood illnesses in Tulo district western Harerghe, Ethiopia, 2024.(n=230)

. The result of bivariate logistic regression analysis showed that age of caregiver, mothers'/caregivers' educational status, perception of early treatment seeking, perceived severity of illness, presence of difficulty breathing, presence of cough, presence of diarrheal disease, sex of child, and number of under-five children were significantly associated with healthcare-seeking behavior at p-value less than 0.25 and then, selected as candidate variables for analysis in multivariable logistic regression, whereas caregivers' relationship with child, age of child, marital status, family size, caregivers' religion, father's education and occupational status, place of residence, monthly income status, birth order of child, child place of delivery, decision making for medical treatment, walking time of reaching the nearest health facility from home, and previous history of under-five child death were not significantly associated with healthcare seeking behavior at p-value less than 0.25 ($p < 0.25$).

However, the result of multivariable logistic regression analysis showed that age of caregivers {(AOR=4.433;95%CI:1.431,13.731) and (AOR= 2.841; 95% CI:1.073,7.518)}, mothers'/caregivers' educational status (AOR= 0.185; 95% CI:0.043, 0.801), and perceived severity of illnesses (AOR= 2.613; 95% CI:1.186, 5.757) were significantly associated with healthcare-seeking behaviour for common childhood illnesses at p-value less than 0.05 ($p\text{-value} < 0.05$).(**Error! Reference source not found.**)

Table 5: Bivariate and multivariate logistic regressions analysis of caregivers' healthcare seeking behaviour (HCSB) in Tulo district, Oromia, East Ethiopia, 2024. (n=230)

Variables	Categories	Health Seeking Behaviour		COR (95% CI.)	AOR (95% CI.)	P<0.05
		Yes	No			
Age of caregivers in year	15-19 year	26	16	2.294 (0.922, 5.707)	4.433 (1.431, 13.731)*	0.010
	20-24 year	44	12	1.017 (0.404, 2.556)	1.926 (0.669, 5.546)	0.224
	25-29 year	34	19	2.083 (0.872, 4.975)	2.841 (1.073, 7.518)*	0.036

Educational status of mothers/caregivers	30-34 year	21	6	1.065 (0.346, 3.281)	1.428 (0.419, 4.872)	0.569
	≥35 year	41	11	1	1	
	Illiterate	54	24	1	1	
	Primary education	85	32	0.847 (0.451, 1.590)	0.544 (0.249, 1.190)	0.127
	Secondary education	19	3	0.355 (0.096, 1.316)	0.185 (0.043, 0.801)*	0.024
Number of under-five children	Diploma and above	8	5	1.406 (0.417, 4.746)	1.170 (0.311, 4.397)	0.816
	One child	81	19	0.369 (0.160, 0.850)	0.398 (0.152, 1.037)	0.059
	Two children	63	31	0.773 (0.349, 1.714)	0.473 (0.177, 1.264)	0.136
Sex of child	Three and above	22	14	1	1	
	Male	87	26	0.621 (0.346, 1.115)	0.637 (0.315, 1.292)	0.211
	Female	79	38	1	1	
Cough	Yes	148	52	0.527 (0.238, 1.168)	0.347 (0.113, 1.062)	0.064
	No	18	12	1	1	
Difficulty breathing	Yes	15	12	2.323 (1.021, 5.285)	1.530 (0.572, 4.097)	0.397
	No	151	52	1	1	
Diarrhea	Yes	91	41	1.469 (0.810, 2.664)	1.490 (0.456, 4.865)	0.509
	No	75	23	1	1	
Perceived severity of illness	Severe	48	32	2.458 (1.357, 4.452)	2.613 (1.186, 5.757)*	0.017
	Not severe	118	32	1	1	
Perception on importance of early seeking treatment	Yes	96	43	1.493 (0.815, 2.73)	1.477 (0.412, 5.296)	0.549
	No	70	21	1	1	

*Significantly associated at P-value < 0.05 in multivariate analysis

CHAPTER SIX: DISCUSSION

This study was aims to explore health care seeking behaviour for common childhood illnesses (such as fever, diarrhoea, and ARI, which includes cough and difficulty breathing) and its associated factors among mothers'/caregivers' of under-five age of children in Tulo district, Ethiopia. Finding from this current study revealed that 72.2% of caregivers sought health care services when children developed illnesses. This study revealed that there are independent variables which significantly associated with healthcare-seeking behaviour (HCSB) for common childhood illnesses. These variables were age of caregiver, educational status of mothers or caregivers, perception of early treatment seeking for childhood illnesses, and perceived severity of illnesses.

The finding of this current study revealed that the overall mothers'/caregivers' healthcare-seeking behaviour for common childhood illness was 72.2% (95% CI: 66.4%-78%). This finding is consistent with study conducted in Addis Ababa (Asefa et al., 2020), Tigray region (Fissehaye et al., 2018), Jeldu district Oromia region (Kolola et al., 2016), Sidama region (Yeheyis et al., 2023), Southern nation and nationality of peoples of Ethiopia (SNNP) (Bekele et al., 2014), and Addis Ababa (Bellete and Boke, 2021) and Zambia (Chirwa et al., 2023).

This similarity of finding might be due to similarity in research methods, availability of healthcare services, and socio-demographic characteristics of respondents. Nonetheless, the current results are lower compared to the previous study conducted in the Kimbibit district of Oromia region (Asrat *et al.*, 2021), Amara region(Dagnew et al., 2018), Sub-Saharan Africa (SSA) (Aragaw et al., 2020), Nepal (Tiwari *et al.*, 2022), and Chad (Budu *et al.*, 2021). The variation in the prevalence of HCSB for common childhood illnesses across different regions or countries might be due to differences in socio-cultural factors, research methodologies, period of the study, quality of healthcare services and policies, and sample size when compared to this current study.

Conversely, the current findings are higher compared to the study conducted in India (Varghese and Muhammad, 2023), SSA (Tesema and Seifu, 2023), East African country (Aragaw, Afework and Getahun, 2020), Afghanistan (Tawfiq *et al.*, 2023), systemic review and meta-analysis in Ethiopia (Zenebe *et al.*, 2022b), EDHS (Aragaw *et al.*, 2024), Amara Region (48.8%, 59.1%, & 60.27%) (60, 80, 81). This discrepancy might be due to the improvement of healthcare services qualities, study setting, and study period. Another possible explanation might be due to enhancement in development of rural and urban health extension programmes which create understanding of

healthcare seeking behaviour. Possible explanation for high prevalence of HCSB in the study area might be due to expansion of primary healthcare facilities like health posts, health centres, clinic, and community health programs, which can provide standardized management for childhood illnesses.

This study identified that there were three factors which influencing mothers'/caregivers' HCSB for common childhood illnesses in the study area. The age of mother/caregiver is one of the most influencing factors of healthcare seeking behaviour for common childhood illnesses. In this current study finding, mothers/caregivers aged 15-19 and 25-29 years old were more than four times and almost three times more likely to seek healthcare for common childhood illnesses compared to those whose age greater than or equal to 35years old respectively.

This current finding also indicates that younger caregivers are more likely to seek healthcare services for sick children compared to older caregivers. This finding is consistent with a study conducted in Oromia region (Sori, 2007) and Amara region (Sisay et al., 2016). In contrary to current finding, the finding of study done in Afghanistan revealed that older mothers/caregivers of under-five children were more likely to seek health care service for common childhood illness than those with younger age one (Tawfiq *et al.*, 2023).The possible explanation of this discrepancy might be due to socio-demographic difference between the two countries and younger caregivers may be more responsive to seek treatment due to their recent exposure to health education and community program like one to five women networking effectively than those with older age group.

In this study, the educational status of mothers/caregivers was another identified factor affecting healthcare seeking behaviour for common childhood illnesses. The current study found that mothers'/caregivers with secondary educational level (grades 9-12) were almost 82% less likely to seek treatment for sick children than not educated one. This finding is consistent with previous research conducted in Tigray region (Weldesamuel *et al.*, 2019), and Nepal (Khasanah *et al.*, 2023).

In contrast, study finding in Yemen (Webair and Bin-Gouth, 2013) revealed, it is clear that increased mothers'/caregivers' health care seeking behaviour and higher educational levels are correlated to each other. As a result of school education, caregivers could have increased awareness on treatment seeking behaviour for common childhood illnesses compared to those who were not

educated. According to finding of study done in India (Nazir *et al.*, 2015) identified, the possible reason might be due to having low knowledge of caregivers with higher educational level on self-medication on how to treat their child by home remedies or buying drug from pharmacy without prescription of health profession. As a result, they have less likely to visit health facilities compared to their counterpart, since they initially treat their children at home.

Another factor influencing decision of mothers'/caregivers' health seeking behaviour for common childhood illnesses was their perception of severity of child illness. Identifying danger signs during childhood illnesses more motivates mothers/caregivers to seek treatment at health facilities when their children developed ill. Also, the current study revealed that caregivers who perceived severity of their child illness as severe were nearly three times more likely to seek health care for ill child compared to those perceived illness as not severe. This finding is similar with study conducted in Oromia region (Kolola *et al.*, 2016), Addis Ababa (Abegaz *et al.*, 2019; Bellete and Boke, 2021), Tigray (Weldesamuel *et al.*, 2019), and Nepal (Tiwari *et al.*, 2022b).

The possible explanation might be due to caregivers' psychological factors, socio-demographic and cultural similarity of the two countries. For example, in Ethiopia there is strong cultural emphasis on family and community responsibility regarding care of children. So, mothers/caregiver of children with severe illness may be more likely to seek treatment at health facilities to avoid further complication than those with mild illness.

CHAPTER SEVEN: STRENGTH AND LIMITATION OF STUDY

7.1. Strength

- Community-based study and the minimal non-response rate
- Using Kobo toolbox for data collection

7.2. Limitation

The measurement of common childhood illnesses was based on caregivers' perceptions and not based on exact medical diagnosis. This self-reported data may be prone to recall, reporting, and social desirability biases. Additionally, the cross-sectional study design means that the associations found may not imply a temporal relationship.

CHAPTER EIGHT: CONCLUSION AND RECOMMENDATION

8.1. Conclusion

The prevalence of healthcare-seeking behaviour for common childhood illnesses in the study area was high compared to others previous study conducted in some parts of Ethiopia. Mothers'/caregivers' age, educational status of mothers/caregivers and perceived severity of illnesses were factors significantly associated with health care seeking behaviour for common childhood illnesses.

8.2. Recommendation

For Regional Health Bureau and District Health Office

- Better to strengthen/ reinforce strategies which focus on community based maternal education regarding health care seeking behaviour for common childhood illnesses
- They should implement strategies to enhance perception of community on early health care seeking behaviour related to common childhood illnesses
- Better to formulate their strategies which improves awareness of community centred to ways by which the caregivers can identify the severity of their childs' illnesses

For Health Facilities

- Health facilities in the district should strengthen daily health education given by health professional regarding health care seeking behaviour for common childhood illnesses

For Researchers

- Others researchers should conduct study using mixed method to overcome all possible problems and
- Also better to conduct study at private clinics or government health institutions like health centers and hospital in the district

CHAPTER NINE: REFERENCES

- Abate, M.G., Angaw, D.A. and Shaweno, T. (2020) ‘Proximate determinants of infant mortality in Ethiopia, 2016 Ethiopian demographic and health surveys: Results from a survival analysis’, *Archives of Public Health*, 78(1), pp. 1–10. Available at: <https://doi.org/10.1186/s13690-019-0387-4>.
- Abegaz, N.T., Berhe, H. and Gebretekla, G.B. (2019) ‘Mothers / caregivers healthcare seeking behavior towards childhood illness in selected health centers in Addis Ababa , Ethiopia : a facility-based cross-sectional study’, (July). Available at: <https://doi.org/10.1186/s12887-019-1588-2>.
- Adane, M. *et al.* (2017) ‘Utilization of health facilities and predictors of health-seeking behavior for under-five children with acute diarrhea in slums of Addis Ababa , Ethiopia : a community-based cross-sectional study’, pp. 1–12. Available at: <https://doi.org/10.1186/s41043-017-0085-1>.
- Addisu, Y., Vata, P.K. and Berhanu, Y. (2020) ‘Assessment of Knowledge of Mother on Danger Signs of Neonatal and Postnatal Illness and Health Seeking Behaviour Assessment of Knowledge of Mother on Danger Signs of Neonatal and Postnatal Illness and Health Seeking Behaviour Among Pregnant and Postpartum’, (January 2016).
- Ahinkorah, B.O. *et al.* (2021) ‘Barriers to healthcare access and healthcare seeking for childhood illnesses among childbearing women in sub-Saharan Africa: A multilevel modelling of Demographic and Health Surveys’, *PLoS ONE*, 16(2 February). Available at: <https://doi.org/10.1371/journal.pone.0244395>.
- Alamneh, Y.M., Getachew, M. and Atnaf, A. (2022) ‘Mothers ’ health care-seeking behavior and associated factors for common childhood illnesses in Ethiopia : A systematic review and meta-analysis’. Available at: <https://doi.org/10.1177/20503121221099019>.
- Aragaw, F.M., Teklu, R.E., Alemayehu, M.A., Derseh, N.M., *et al.* (2024) ‘Magnitude and determinant of healthcare-seeking behavior for childhood acute respiratory tract infections in Ethiopia: a cross-sectional study’, *BMC Pediatrics*, 24(1), pp. 1–8. Available at: <https://doi.org/10.1186/s12887-023-04463-7>.
- Aragaw, F.M., Teklu, R.E., Alemayehu, M.A. and Derseh, N.M. (2024) ‘Magnitude and determinant of healthcare - seeking behavior for childhood acute respiratory tract infections in Ethiopia : a cross - sectional study’, *BMC Pediatrics*, pp. 1–8. Available at: <https://doi.org/10.1186/s12887-023-04463-7>.
- Aragaw, T.J., Afework, D.T. and Getahun, K.A. (2020) ‘Assessment of Knowledge , Attitude , and Utilization of Traditional Medicine among the Communities of Debre Tabor Town , Amhara Regional State , North Central Ethiopia : A Cross-Sectional Study’, 2020.
- Asefa, A. *et al.* (2020) ‘<p>Determinants of Delayed Treatment-Seeking for Childhood Diarrheal Diseases in Southwest Ethiopia: A Case–Control Study</p>’, *Pediatric Health, Medicine and Therapeutics*, Volume 11, pp. 171–178. Available at: <https://doi.org/10.2147/phmt.s257804>.
- Asekun-Olarinmoye Esther, O. and Fawole, O. (2014) ‘Maternal Perception and Care-Seeking Patterns for Childhood Febrile Illnesses in Rural Communities of Osun State, South-Western

Nigeria', *Science Journal of Public Health*, 2(6), pp. 636–643. Available at: <https://doi.org/10.11648/j.sjph.20140206.32>.

Asrat, H. *et al.* (2021) 'Healthcare Seeking Behavior of Mothers or Care Givers for Common Childhood Illness of Under Five Years Children and Associated Factors in Kimbibit District , Ethiopia , 2020', 9(4), pp. 121–134. Available at: <https://doi.org/10.11648/j.sjph.20210904.12>.

Bahrami, M.A. *et al.* (2014) 'Developing a valid tool of treatment seeking behavior survey for Iran', *J Novel Appl Sci*, 3(6), pp. 651–660.

Begashaw, B. and Tesfaye, T. (2016) 'Healthcare Utilization among Urban and Rural Households in Esera District: Comparative Cross-sectional Study', *American Journal of Public Health Research*, 4(2), pp. 56–61. Available at: <https://doi.org/10.12691/ajphr-4-2-3>.

Bekele, D.E. *et al.* (2014) 'Assessment of healthcare seeking behavior of caregivers for common childhood illnesses in Shashogo Woreda, Southern Ethiopia'.

Bellete, M. and Boke, M.M. (2021) 'Child Caregiver ' s healthcare seeking behavior and its determinants for common childhood illnesses in Addis Ababa , Ethiopia : a community-based study', *Italian Journal of Pediatrics*, 47:99, pp. 1–8. Available at: <https://doi.org/https://doi.org/10.1186/s13052-021-01049-w>.

Chilot, D. *et al.* (2022) 'Factors associated with healthcare-seeking behavior for symptomatic acute respiratory infection among children in East Africa: a cross-sectional study', *BMC Pediatrics*, 22(1), pp. 1–10. Available at: <https://doi.org/10.1186/s12887-022-03680-w>.

Chirwa, T. *et al.* (2023) 'A cross-sectional study on factors associated with health care seeking for acute respiratory infection and fever in children under-five in Zambia'.

Chopra, M. *et al.* (2013) 'Ending of preventable deaths from pneumonia and diarrhoea: An achievable goal', *The Lancet*, 381(9876), pp. 1499–1506. Available at: [https://doi.org/10.1016/S0140-6736\(13\)60319-0](https://doi.org/10.1016/S0140-6736(13)60319-0).

Dagnew, A.B., Tewabe, T. and Murugan, R. (2018) 'Level of modern health care seeking behaviors among mothers having under five children in Dangila town, north West Ethiopia, 2016: A cross sectional study', *Italian Journal of Pediatrics*, 44(1), pp. 1–6. Available at: <https://doi.org/10.1186/s13052-018-0503-z>.

Demelash, D., Yasine, T. and Mebratu, W. (2020) 'Health Care Seeking Behavior of Mothers for Common Childhood Illness and Associated Factors in Woldia Town Administration , Northeast', *Fam Med Med Sci Res* 9:, 9(4), pp. 1–7. Available at: <https://doi.org/10.35248/2327-4972.20.9.256>.Copyright.

Demelash, D., Yasine, T. and Mebratu, W. (no date) 'Health Care Seeking Behavior of Mothers for Common Childhood Illness and Associated Factors in Woldia Town Administration , Northeast', pp. 1–7. Available at: <https://doi.org/10.35248/2327-4972.20.9.256>.Copyright.

Demissie, B. *et al.* (2014) 'Ethiopian Of Health Development', (February 2015).

District, E.G., Amhara, E. and Getahun, G.K. (2021) 'Magnitude of Common Childhood Illness ,

Health Care Seeking Behavior , and Associated Factors in’.

Duru, C.B. *et al.* (2017) ‘Health Care Seeking Behaviour and Predictors of Combined Orthodox and Traditional Health Care Utilization among Households in Communities in Owerri , Imo State , Nigeria’, pp. 115–137. Available at: <https://doi.org/10.4236/ojpm.2017.77010>.

Ethiopian Federal ministry of health (2015) ‘Ethiopian National Expanded program on Immunization comprehensive multi-year plan’, pp. 1–104.

Ethiopian Public Health Institute Addis Ababa (2019) *Ethiopia Mini Demographic and Health Survey, FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA Ethiopia*.

Federal ministry of health, F.H.D. (2016) ‘National Strategy for Child Survival in Ethiopia 2015/16-2019/20 Maternal’, *Magzine Article*, (June 2015), pp. 1–74.

Fetensa, G. *et al.* (2019) ‘Health Seeking Behavior of Mothers or Primary Caregivers and Associated Factors for Under Five Children with Illness among Mothers Attending Bake Jama Health Center , Nekemte , East Wollega , Oromia’, 11(2), pp. 172–178. Available at: <https://doi.org/10.4172/1948-593X.1000230>.

Fikre Bojola, B. *et al.* (2018) ‘Assessment of Health Care Seeking Behavior among House Hold Heads in Dale Woreda, Sidama Zone, Southern Ethiopia, Ethiopia’, *Type: Double Blind Peer Reviewed International Research Journal Publisher: Global Journals Online*, 18(1).

Fissehay, T. *et al.* (2018) ‘Health care seeking behaviour of mothers towards diarrheal disease of children less than 5 years in Mekelle city , North Ethiopia’, *BMC Research Notes*, pp. 1–7. Available at: <https://doi.org/10.1186/s13104-018-3850-3>.

FMOH (2021) *Mini Demographic and Health Survey 2019*.

FMoH Ethiopia (2022) ‘Ethiopia Malaria Profile’, *CDC*, 2(Fy 2022), pp. 1–20.

FMoH Ethiopia (no date a) *HIV/AIDS NATIONAL STRATEGIC PLAN FOR ETHIOPIA 2021-2025*.

FMoH Ethiopia (no date b) *Integrated Management of Newborn and Childhood Illness, Part 2*.

Gbemisola, I., Id, A. and Cavallaro, F.L. (2022) ‘Determinants of care-seeking behaviour for fever , acute respiratory infection and diarrhoea among children under five in Nigeria’, pp. 1–18. Available at: <https://doi.org/10.1371/journal.pone.0273901>.

Getahun, G.K. *et al.* (2022) ‘Magnitude of Common Childhood Illness , Health Care Seeking Behavior , and Associated Factors in Efratana Gidim District , East Amhara , Ethiopia , 2020’, 7(1), pp. 100–111.

Girma, K. *et al.* (2020) ‘Community ’ s perception , experiences and health seeking behavior towards newborn illnesses in Debre Libanos District , North Shoa , Oromia , Ethiopia : Qualitative study’, pp. 1–19. Available at: <https://doi.org/10.1371/journal.pone.0227542>.

Girma Workul * and Deselegn Tesema2 (2022) ‘Factors Affecting Health Seeking Behaviors on Common Childhood Illness among Mothers/Caregivers of Rural Households Having Under Five Children in, Yirga Chefe District, Gedeo Zone, SNNPR, Ethiopia’, *EC NURSING AND*

HEALTHCARE, 10(4), pp. 30–39.

Hunde, G.A. *et al.* (2024) ‘Delayed Healthcare Seeking and Associated Factors for Common Childhood Illnesses among Caregivers with Under-Five Children in Southwestern’, *CC-BY 4.0 International license* . 30, pp. 1–25. Available at: <https://doi.org/10.1101/2024.01.12.24301231>.

Id, B.L. *et al.* (2022) ‘Individual and community-level factors of treatment-seeking behaviour among caregivers with febrile children in Ethiopia: A multilevel analysis’, 491, pp. 1–15. Available at: <https://doi.org/10.1371/journal.pone.0264707>.

Id, E.B. *et al.* (2021) ‘Factors associated with healthcare seeking for childhood illnesses among mothers of children under five in Chad’, *PLOS ONE*, pp. 1–13. Available at: <https://doi.org/10.1371/journal.pone.0254885>.

Id, G.T. *et al.* (2022a) ‘Health care seeking behavior for common childhood illnesses in Birendranagar municipality, Surkhet, Nepal: 2018 Ganga’, *PLOS ONE*, pp. 1–15. Available at: <https://doi.org/10.1371/journal.pone.0264676>.

Id, G.T. *et al.* (2022b) ‘PLOS ONE Health care seeking behavior for common childhood illnesses in Birendranagar’, pp. 1–15. Available at: <https://doi.org/10.1371/journal.pone.0264676>.

Initiative, Malaria Operational, Malaria Fy, P. (2022) ‘U . S . PRESIDENT ’ S MALARIA INITIATIVE Ethiopia Malaria Operational Plan FY 2022’, *Malaria Operational Plan FY*, pp. 1–79.

‘INTERNATIONAL AGENCY FOR RESEARCH ON CANCER IARC MONOGRAPHS ON THE EVALUATION OF CARCINOGENIC RISKS TO HUMANS’ (2002).

Johnson, H.L. *et al.* (2010) ‘Estimating the distribution of causes of death among children age 1-59 months in high-mortality countries with incomplete death certification.’, *International journal of epidemiology*, 39(4), pp. 1103–1114. Available at: <https://doi.org/10.1093/ije/dyq074>.

Kebede, Z.T. (2018) ‘High common childhood illnesses while the treatment-seeking behavior of mothers / caregivers ’ was low in rural northwest Ethiopia in 2018 . A’, pp. 1–25.

Kebede, Z.T. (2020) ‘High common childhood illnesses while treatment seeking behavior of mothers ’/ care givers ’ was low at rural northwest Ethiopia’, *Research square*, pp. 1–22. Available at: <https://doi.org/https://doi.org/10.21203/rs.2.17005/v3> License:

Khalil, M.M. *et al.* (2019) ‘Factors Affecting Health Seeking Behaviors Among Mothers of Under Five Factors Affecting Health Seeking Behaviors Among Mothers of Under Five Children Attending Primary Health’, *Science Journal of Public Health*, 7(6), pp. 181–186. Available at: <https://doi.org/10.11648/j.sjph.20190706.11>.

Khasanah, U. *et al.* (2023) ‘Healthcare-seeking behavior for children aged 0–59 months: Evidence from 2002–2017 Indonesia Demographic and Health Surveys’, *PLoS ONE*, 18(2), pp. 1–17. Available at: <https://doi.org/10.1371/journal.pone.0281543>.

Kolola, T., Gezahegn, T. and Addisie, M. (2016) ‘Health Care Seeking Behavior for Common Childhood Illnesses in Jeldu District , Oromia Regional State , Ethiopia’, pp. 1–11. Available at: <https://doi.org/10.1371/journal.pone.0164534>.

Lungu, E.A., Darker, C. and Biesma, R. (2020) ‘Determinants of healthcare seeking for childhood illnesses among caregivers of under-five children in urban slums in Malawi : a population-based cross-sectional study’, *BMC Pediatrics*, 20(20), pp. 1–13. Available at: <https://doi.org/10.1186/s12887-020-1913-9>.

Mishra, K., Mohapatra, I. and Kumar, A. (2019) ‘Original Article A study on the health seeking behavior among caregivers of under - five children in an urban slum of Bhubaneswar , Odisha’, pp. 498–503. Available at: <https://doi.org/10.4103/jfmprc.jfmprc>.

‘Mothers / caregivers healthcare seeking behavior towards childhood illness in selected health centers in Addis Ababa , Ethiopia : a facility-based cross-sectional study’ (2019) *BMC Pediatric*, pp. 1–9. Available at: <https://doi.org/10.1186/s12887-019-1588->.

Muluye Molla Simieneh, M.Y.& A.A.G. (2021) ‘Effect of Community-Based Health Insurance on Healthcare-Seeking Behavior for Childhood Illnesses Among Rural Mothers in Aneded District , Effect of Community-Based Health Insurance on Healthcare-Seeking Behavior for Childhood Illnesses Among Rural Mother’, *Risk Management and Healthcare Policy*, 1659–1668, pp. 1–11. Available at: <https://doi.org/10.2147/RMHP.S298658>.

Nazir, S. *et al.* (2015) ‘Parent induced self-medication among under five children:An observational cross sectional study’, *TAF Preventive Medicine Bulletin*, 14(2), pp. 81–86. Available at: <https://doi.org/10.5455/pmb.1-1381246690>.

Noordam, A.C. *et al.* (2015) ‘Care seeking behaviour for children with suspected pneumonia in countries in sub-Saharan Africa with high pneumonia mortality’, *PLoS ONE*, 10(2), pp. 1–14. Available at: <https://doi.org/10.1371/journal.pone.0117919>.

Obsie, G.W. (2023) ‘Factors Affecting Health Seeking Behaviors on Common Childhood Illness among Mothers/Caregivers of Rural Households Having Under Five Children in, Yirga Chefe District, Geddo Zone,...’, (August).

Pediatric Experts (no date) ‘Immunodeficiency and Infection: Who Is at Risk?’, *NATION WIDE CHILDREN* [Preprint].

Region, S.E. (2024) ‘Us\$535.3’, pp. 1–5.

Report, S. (2023) *ETHIOPIA Situation Report*.

Report, S. (2024) *HIGHLIGHTS (10 Jan 2024)*.

Shewamene, Z., Dune, T. and Smith, C.A. (2020) ‘Use of traditional and complementary medicine for maternal health and wellbeing by African migrant women in Australia : a mixed method study’, *BMC Complementary Medicine and Therapies*, 6, pp. 1–12.

Simieneh, M.M. *et al.* (2019) ‘Mothers ’ health care seeking behavior and associated factors for common childhood illnesses , Northwest Ethiopia : community based cross-sectional study’, 4, pp. 1–7.

Sisay, S., Endalew, G. and Hadgu, G. (2016) ‘Assessment of Mothers / Care Givers Health Care Seeking Behavior for Childhood Illness in Rural Ensaro District , North Shoa Zone , Amhara Region

, Ethiopia 2014 Assessment of Mothers / Care Givers Health Care Seeking Behavior for Childhood Illness in Rur', (September 2015).

Sori, A. (2007) 'Assessment of perceptions, beliefs and practices of childhood diarrheal disease management in Karrayu community, Fantale Woreda, Oromia, Ethiopia', (January).

Sultana, M. *et al.* (2019) 'Prevalence, determinants and health care-seeking behavior of childhood acute respiratory tract infections in Bangladesh', *PLoS ONE*, 14(1), pp. 1–18. Available at: <https://doi.org/10.1371/journal.pone.0210433>.

Tawfiq, E. *et al.* (2023) 'Original Article Predictors of Mothers ' Care Seeking Behavior for Common Childhood Illnesses: Findings From the Afghanistan Health Survey 2015', *Kerman University of Medical Sciences*, 12, p. 7598. Available at: <https://doi.org/10.34172/ijhpm.2023.7598>.

Tesema, G.A. and Seifu, B.L. (2023) 'Factors associated with mother's healthcare-seeking behavior for symptoms of acute respiratory infection in under-five children in sub-Saharan Africa: a multilevel robust Poisson regression modelling', *BMC Health Services Research*, 23(1), pp. 1–11. Available at: <https://doi.org/10.1186/s12913-023-10065-x>.

UNICEF (2018) 'UNICEF Briefing Note Series on: SDG Global Indicators Related to Children', pp. 1–73.

UNICEF (2023) *Global Child health coverage of underfive children for whom treatment was sought at health facility*.

UNICEF (2024) *Humanitarian Action for Children*.

UNIGME (2024) *Levels & Trends in Child Mortality; Report 2023, Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation*. New York.

Varghese, J.S. and Muhammad, T. (2023) 'Prevalence, potential determinants, and treatment-seeking behavior of acute respiratory infection among children under age five in India: Findings from the National Family Health Survey, 2019-21', *BMC Pulmonary Medicine*, 23(1), pp. 1–11. Available at: <https://doi.org/10.1186/s12890-023-02487-4>.

Villavicencio, F. *et al.* (2024) 'Global, regional, and national causes of death in children and adolescents younger than 20 years: an open data portal with estimates for 2000-21.', *The Lancet. Global health*, 12(1), pp. e16–e17. Available at: [https://doi.org/10.1016/S2214-109X\(23\)00496-5](https://doi.org/10.1016/S2214-109X(23)00496-5).

Wambui, W.M., Kimani, S. and Odhiambo, E. (2018) 'Determinants of Health Seeking Behavior among Caregivers of Infants Admitted with Acute Childhood Illnesses at Kenyatta National Hospital , Nairobi , Kenya', 2018.

Webair, H.H. and Bin-Gouth, A.S. (2013) 'Factors affecting health seeking behavior for common childhood illnesses in Yemen', *Patient Preference and Adherence*, 7, pp. 1129–1138. Available at: <https://doi.org/10.2147/PPA.S51124>.

Weldesamuel, G.T. *et al.* (2019) 'Modern health-seeking behaviour and associated factors among mothers having under 5-years old children in Shire town , Tigray , Ethiopia : A cross-sectional study 2018', pp. 1–6.

Woldeamanuel, B.T. (2020) ‘Trends and Factors Associated with Healthcare Utilization for Childhood Diarrhea and Fever in Ethiopia: Further Analysis of the Demographic and Health Surveys from 2000 to 2016’, 2020.

Yaya, S., Odusina, E.K. and Adjei, N.K. (2021) ‘Health care seeking behaviour for children with acute childhood illnesses and its relating factors in sub - Saharan Africa: evidence from 24 countries’, *Tropical Medicine and Health*, pp. 1–8. Available at: <https://doi.org/10.1186/s41182-021-00385-1>.

Yeheyis, T. *et al.* (2023) ‘Heliyon Level of modern health-seeking behavior for common childhood illnesses and its associated factors among mothers of under-five children in southern Ethiopia: A community based study’, *Heliyon*, 9(9), p. e20121. Available at: <https://doi.org/10.1016/j.heliyon.2023.e20121>.

Zenebe, G.A. *et al.* (2022a) ‘Level of Mothers’/Caregivers’ Healthcare-Seeking Behavior for Child’s Diarrhea, Fever, and Respiratory Tract Infections and Associated Factors in Ethiopia: A Systematic Review and Meta-Analysis’, *BioMed Research International*, 2022, p. 13. Available at: <https://doi.org/10.1155/2022/4053085>.

Zenebe, G.A. *et al.* (2022b) ‘Review Article Level of Mothers ’ / Caregivers ’ Healthcare-Seeking Behavior for Child ’ s Diarrhea , Fever , and Respiratory Tract Infections and Associated Factors in Ethiopia : A Systematic Review and Meta- Analysis’, 2022.

CHAPTER TEN: ANNEXES

10.1. ANNEX I: INFORMATION SHEET & CONSENT FORM

Good morning/afternoon: For assessment/study group (i.e. Mothers or caregivers)

1. Introduction: My name is_____ and currently employed as a data collector for Mr. Shimelis Alemayehu Gezahegn from the College of Health Sciences at Salale University. The researcher main aim of preparing this information sheet and consent form is to study prevalence of healthcare seeking behaviour for common childhood illnesses and its associated factors among mothers or caregivers of under-five age of children in Tulo district.

2. Research Title: Assessing prevalence of healthcare seeking behaviour for common childhood illness and its associated factors among mothers/caregivers of under-five age of children in Tulo district, West Harerghe Zone.

3. Purpose/aim of the Study: The purpose of this study is to survey mothers or caregivers to investigate behaviour and other factors associated with illnesses of children under-five years of age in Tulo district. This information is for parents of children under-five in the district. The results will

help the Oromia Health Office, Zone and District Health Offices to take appropriate measures to solve the problems of the people and improve the health outcomes of children. Therefore, your answer is very important and will help prepare the necessary support to develop the correct treatment, taking into account caregivers in case of illness of under-five children.

4. Procedure and Duration: You were randomly selected for study to evaluate health-seeking behaviour and its associated factors among mothers/caregivers of under-five age children during common childhood illness in Tulo district. We invite you to participate in the survey. If you want to participate in the research, you must understand and give verbal or sign the consent form. You will then be asked to give your answer to the data collector for this question-focused study. Participants were mother/caregivers of children under the age of five living in the Tulo district. I will ask you a total of 47 questions, which will take 20-30 minutes. All participant responses and results remain secret and confidential using a code system so that no one can see your results.

5. Risks: There are no risks to participating in this study. However, you may have a particular problem that a few minutes are wasted, but this may not be so much compared to the benefit that can contribute to the development of the appropriate healthcare seeking behaviour

6. Benefits: participating on this study may not give any direct benefits for you, but your participation may help us evaluate treatment-seeking behaviour of caregivers in the Tulo area and factors associated with common diseases in their children. It will also provide information on maternal HCSB based on research findings for improving health status of the community.

7. Incentives: You will not receive funding for participating in this project.

8. Confidentiality and Anonymity: The information we collect in this research project will be kept confidential. The information collected from you will be stored in a file that does not contain your name, but contain the code number assigned to it. The number is anonymous, kept under lock and key and not disclosed to anyone except the principal investigator.

9. Right to Refuse or Withdraw: You have the right to refuse participation in this research without affecting your health services, and to withdraw at any time without losing any rights as a beneficiary of health services.

Qn. Are you voluntary to participate on this study (verbal consent)?

1. Yes 2.No.

If response is ‘Yes’ continue asking your questions, but if response is ‘No’ give thanks for participant and submit the questionnaire, then move to the next study participant.

Name of interviewer_____ Sign_____ Date of interview_____

Name of Supervisor _____ Sign_____ Date_____

Researcher Contact Address: If you have any questions regarding the study/the procedure at any time, please contact the following address.

Phone number: 0935604932 and Email address:shimealex87@gmail.com

10.2. Annex II: English Version Questionnaires

PartI: General Information of mothers’/caregivers’ and children socio-demographic characteristics

Q/No.	Questions	Responses	Skip
Q101	The caregiver’s relationship with the child	1.Mother 2.Father 3.Grand parents 4.Other	
Q102	Age of caregiver (write age in year)	_____	
Q103	Place of Residence	1.Rural 2.Urban	
Q104	Current marital status of caregiver	1.Single 2.Married 3.Divorced 4.Widowed	
Q105	Religion of caregiver	1.Orthodox 3.Protestant 2.Muslim 4.Catholic 5. Others	

Q106	Educational status of mother/caregiver	1.Unable to read and write 2.Able to read and write 3.Primary (grades1-4) 4.Primary completed(grades5-8) 5.Secondary(grades9-10) 6.Secondary completed(grades11-12) 7.Higher level and above 99.I don't know	
Q107	Educational status of father	1.Unable to read and write 2.Able to read and write 3.Primary (grades1-4) 4.Primary completed(grades5-8) 5.Secondary(grades9-10) 6.Secondary completed(grades11-12) 7.Higher level and above 99.I don't know	
Q108	Occupational status of mother/caregiver	1.Housewife 2. Daily worker 3.Farmer 4.Government employment 5.Student 6.Merchant 7.Others	
Q109	Occupational status of father	1.Housewife 2.Daily worker 3.Farmer 4.Government employment 5.Student 6.Merchant	

		7.Others 99.I don't know	
Q110	Average monthly income status of family	_____ in Ethiopian birr	
Q111	Number of family members living in house(write in number)	_____ person	
Q112	Number of under-five children in the family(those only of one mother)	1.One 2.Two 3.Three and above	
Q113	Have you been previous history of under-five child death?	1.Yes 2.No	
Q114	Sex of the child	1.Male 2.Female	
Q115	Age of child (write in month)	___months	
Q116	Birth order of child(write in order)	1.First 2.Scond 3.Third 4. Fourth and above	
Q117	Child's place of delivery	1.At health institution 2.At home 99. I don't know	

Part II: Health Care-Seeking Behaviour of Mother/Caregiver for common childhood illness

Q/No.	Questions	Responses	Skip
Q201	Has this child been sick within the past three months ?	1.Yes 2.No	If 'No' skip to Q216
Q202	Did your child have cough within the past three months?	1.Yes 2.No	
Q203	Did your child have difficulty of breathing in the past three months?	1.Yes 2.No	

Q204	Did your child have fever within the past three months??	1.Yes 2.No	
Q205	Did your child have diarrhoea within the past three months?	1.Yes 2.No	
Q206	Did your child have two or above two symptoms of illnesses within the past three months?	1.Yes 2.No	
Q207	How many times has this child been sick in the last three months?	1.One time 2.Two and above times	
Q208	Have you sought advice/ treatment for symptoms of a recent illness?	1.Yes 2.No	If 'No' skip to Q213
Q209	If 'Yes' for question 208,Where did you visit first sick child to seek advice or treatment? (Select one)	1.Health institutions(HI) 2.Religious area 3.Holy water place 4.Traditional healer 5.Self-treatment at home 6.Bought drug from pharmacy without prescription	If answer for Q209 is not HI, skip to Q211
Q210	If the answer for Q209 is health institutions, to which institution did you take your child first? (Select one)	1.Hospitals 2.Health center 3.Health post 4.Private clinic	
Q211	How long did you wait to seek treatment after the onset of the child's illness? (Select one)	1.Within one day 2.At 2-3 days 3.At 4-7 days 4.After 7 days	

Q212	What were the main reasons you took a sick child to a health facility to seek treatment?(Select multiple response)	1.Worsened child condition 2.Advice from other persons 3.Proximity of health facility 4.Fear of death 5.Previous experience of similar disease 6.Medication cost is not expensive 7.Belief that disease will be cured at this facility 8.Others	
Q213	What are the main reasons for not seeking treatment at health institutions?(Select multiple response)	1.Lack of money for treatment 2.Believe that this disease is cured by traditional medicine. 3.Believe that disease is not cure by modern medicine 4.Long distance from the health facility. 5.Lack of self-decision 6.Fear of long waiting time/no immediate care 7.Illness was not serious 8.Previous bad experience from health professional. 9.Believe that disease is not curable 10.Others	
Q214	According to your perception, how did you understand degree of severity of your child's illness? (Select one)	1.Mild 2.Moderate 3.Severe	
Q215	How did you identify the severity level of your child's recent illness?(Select multiple response)	1.When behaviour of child changed 2.When Illness continue for long time	

		3.Difficulty of child to suck breast or eating food 4.Combined symptoms of disease 5.Others	
Q216	Who is decision maker for medical treatment?(Select one)	1.Mother 2.Father 3.Both 4.Grand parent 5.Others	

Part III: Mothers'/caregivers' perception regarding importance of early seeking treatment, causes of common childhood illnesses, and ways of identifying severity of illness.

S/No_	Questions	Response	Skip
Q301	Do you believe it is important to go to health facilities immediately when children are sick?	1.Yes 2.No	
Q302	Do you believe that a child with diarrhoea should go to health institution within one day?	1.Yes 2. No	
Q303	Do you believe that a child with cough or difficulty of breathing should go to health institution within one day?	1.Yes 2. No	
Q304	Do you believe that a child with fever should go to health institution within one day?	1.Yes 2. No	
Q305	How do you think the severity level of childhood illness is identified? (Select multiple response)	1.When behaviour of child changed 2.When Illness continue for long time 3.Difficulty of child to suck breast or eating food 4.When child have combined symptoms of disease	

Q306	What do you think is the possible cause of childhood illness? (Select multiple response)	1.Curse from God 2.Micro-organisms 3.Evil eyes 4.Contaminated water and food 5.Teething 6. Shortage of food 7.Others	
Q307	Do you know about common symptoms and signs of severity of childhood illnesses? (select one)	1.Yes 2.No	If 'No' skip to Q401,
Q308	If 'yes' for Q307, what was your source of information?(select multiple response)	1.Health professionals 2.Radio 3.Television 4.Family 5.Neighbour 6. Others	

Part IV: Information Regarding modern Health Facility

Q/No.	Questions	Responses	Skip
Q401	Is there the nearest modern health facility in your area?	1.Yes 2.No	
Q402	Approximately how many minutes do you walk from your home to get to health facility?(select one without reading choose for respondents) (select one)	1.Below 30 minute 2.30-60 minute 3.Above 60 minute	
Q403	Which modern health facility is relatively closest to you? (select one)	1.Health post 2.Health center 3.Hospital 4.Private clinic	
Q404	Do you think the health delivery services provided by health facility are adequate?(select one)	1.Yes 2.No 99.I don't know	If 'yes' &, I don't know end

			interview
Q405	If 'No' for Q304, what was the main reason?(multiple answers)	1.Increased cost of medication 2.Poor health worker approach's 3.Lack of health professional 4.lack of referral system 5.Other	

Qorannoo Irraatti Hirmaachuuf Eeyyama Gaafachuu fi Ibsaa Qorannoo

1. Seensa: Akkam bultaan/akkam oltaan, maqaan koo_____ yoo ta'u yeroo ammaa Yunivarsiitii Salaalee Kolleejjii Saayinsii Fayyaa irraa Obbo Shimelis Alemayehu Gezahegn tiif daataa walitti qabaa ta'ee qacaramee hojjechaa jira. Kaayyoon qorataa inni guddaan waraqaa odeeffannoo fi unkaa hayyamaa kana qopheesseef, babal'ina amala eegumsa fayyaa barbaaduu dhukkuboota daa'immanii beekamoo fi wantoota isaa wajjin walqabatan haadholii ykn kunuunsitoota daa'imman umuriin isaanii waggaa shanii gadi ta'e, Oromiyaa Zoonii Harergee Lixaa, aanaa Tuuloo keessatti umlaut qorachuudha.

2. Mata Duree Qorannoo: Zoonii Harergee Lixaa Aanaa Tuloo keessatt haadholii/ kunuunsitoota daa'imman umuriin isaanii waggaa shanii gadi ta'e biratti babal'ina amala kunuunsa fayyaa barbaaduu dhukkuba daa'immanii beekamaa fi wantoota isaa wajjin walqabatan madaaluu dha.

3. Kaayyoo/Kaayyoo Qorannichaa: Kaayyoon qorannoo kanaa haadholii ykn kunuunsitoota qorachuudhaan amalaa fi wantoota biroo dhukkuba daa'imman umuriin isaanii waggaa shanii gadi ta'e Aanaa Tulo keessatti argaman waliin walqabatan qorachuudha. Mariin kun warra daa'imman umuriin isaanii waggaa shanii gadi ta'e naannoo Tulootti argamaniif kan qophaa'edha. Bu'aan qorannoo kanaa Biiroo Fayyaa Oromiyaa, Waajjira Fayyaa Godina fi Aanaa tarkaanfii barbaachisaa ta'e fudhachuun rakkoo ummataa haiku fi boa fayyaa daa'immanii fooyyessuuf kan gargaaru ta'a.

Kanaafuu, deebiin keessan baay'ee barbaachisaa waan ta'eef, daa'imman umuriin isaanii waggaa shanii gadi yoo dhukkubsatan kunnunsitootni daa'imanni wal'aansa sirrii ta'e akka barbaaduuf deeggarsa barbaachisu qopheessuuf kan gargaarudha.

4. Ademsaa fi Turtii: Haadholii/kunuunsitoota daa'imman umuriin isaanii waggaa shanii gadi Aanaa Tuloo keessatti amala fayyaa barbaaduu fi wantoota isaa wajjin walqabatan madaaluuf caaraan qorannoof filatamtera. Qorannichaa kana irraatti akka hirmaatan afferamtaniiru, akkasumas hirmaachuu yoo barbaade unkaa hayyamaa hubachuu fi mallatteessuu qabda ykn wali galtee afaanii kennu dandeessu. Sana booda gaaffilee qorannoo gaafatamtuuf deebii kee nama odeeffannoo walitti qabuuf ni kennitan.

Hirmaatonni haadhaa ykn kunnunsitoota daa'imman umriin isaanii waggaa shanii gadi ta'ee fi naannoo Tuloo jiratani dha. Walumaagalatti gaaffii 47 ni gaafatamtu, kunis daqiiqaa 20-30 fudhata. Deebii fi bu'aan hirmaattotaa hundi sirna koodii fayyadamuu, maqaan hin beekamu fi iccitii kan egamedha, akka namni tokkollee oddefannoo kee hin argineef.

5. Rakkollee: hirmaachuun kee rakkoo sittii fiduu hin qabu. Haa ta'u malee, rakkoo addaa daqiiqaa muraasni qisaasa'u qabaachuu dandeessa, garuu kun faayidaa amala kunuunsa fayyaa barbaaduu sirrii ta'e guddisuuf gumaachuu danda'uun wal bira qabamee yoo ilaalamu faayidaa ati alkallattidhaan argatutu caalaa.

6. Faayidaa: pirojektii qorannoo kana irratti yoo hirmaatte, Faayidaa kallattiin tokkollee argachuu dhiisuu dandeessa, garuu hirmaannaan kee amala wal'aansa barbaaduu haadholii/kunuunsitoota naannoo Tuloo fi wantoota dhukkuba waliigalaa ijoollee isaanii keessatti mul'atuun walqabatan madaaluuf nu gargaaruu danda'a. Akkasumas argannoo qorannoo haala fayyaa hawaasaa fooyyessuuf kaayyeffate irratti hundaa'uun amala fayyaa haadholii irratti odeeffannoo ni kenna.

7. Onnachiiftuu: Pirojektii kana irratti hirmaachuu keetiif maallaqa hin argattu.

8. Iccitii Fi Maqaa Dhoksuu: Odeeffannoon waa'ee kee qorannoo keessatti walitti qabame faayilaa maqaa kee hin qabne garuu lakkoofsa koodii itti ramadame of keessaa qabu keessatti ni kuufama. Lakkoofsi kun maqaan isaa kan hin beekamne, qulfii fi furtuu jalatti kan kaa'amee fi qorataa muummichaa malee nama kamiifuu kan hin ibsamne dha.

9. Mirga Diduu ykn Bahuu: Qorannoo kana irratti hirmaachuu diduudhaaf mirga guutuu qabda (gaaffii tokko tokkoof ykn hundaaf deebii kennuu dhiisuu filachuu dandeessa) yoo hirmaachuu hin

barbaanne; kunis tajaajila fayyaa dhaabbilee fayyaa kamirraayyuu argattan irratti dhiibbaa hin geessisu. Akka fayyadama tajaajila fayyaa tokkotti mirga kamiyyuu osoo him dhabiin yeroo barbaaddetti qorannoo kana keessaa ba'uuf mirga guutuu qabda.

10. Teessoo Quunnamtii Qorataa: waa'ee qorannichaa ilaalchise ykn hojimaata yeroo kamiyyuu gaaffii yoo jiraate ykn gaaffii yoo qabaattan teessoo Kanan qunnamaa:

Unkaa Labsii Hayyama Tola Ooltummaa Odeeffannoo Qaban

Oddeeffannoon qorannoo kana ibsutti fayyadaman hawaasaa hundaa akka tahe hubadheera waan taheef qorannoo kana irratti hirmachuuf fedhii qaba. Qorannoon Kun fayyaa koo irratti rakkoo akka hin qabneef fi beenyaan akka hin kaffalamne hubadheera. Qorannoon kana irratti hirmaachuu fi hayyama fedhii koo kennuuf walii gala. Kanaafuu, warreen oddeeffannoo walitti qaban ragaa barbaachisu akka sassabaan hayyameera. Waliigaltee_____ Walii hin galle _____

Maqaa gaafataa_____ Mallattoo_____ Guyyaa af-gaaffii_____

Maqaa To'ataa _____ Mallattoo_____ guyyaa_____

10.3. Annex III: Translated Questionnaires in *Afaan Oromo* version

Kutaa I: Oddeeffannoo Amaloota Hawaasummaa fi Dimoogiraafii Haadholii ykn

Kunuunsitootaa fi Daa'imaani

Lakk.Gaaffii	Gaaffiilee	Deebiiwwaan	Darbi gara
i			
G101	Hariiroon daa'ima waajiin qabdan maali?	1.Haadha 2.Abbaa 3.Akkoo 4.Kan biroo ibsi	
G102	Umriin kee meeqa? (umrii waggan barreessii)	_____	
G103	Bakka Jireenyaa	1. Baadiiyaa 2. Magaalaa	

G104	Haala fuudhaa fi heerumaa	1.Hin herumne 2.Heerumeera 3.Hiikeera 4.Na jala du'ee/duute	
G105	Amantaan kee maalii?	1.Ortodoksii 2.Muslimaa 3.Pirotestantii 4.kaatoolikii 5.Kan biroo ibsi	
G106	Sadarkaan barumsaa ati xumurte inni guddaan meeqa? (kan haadha ykn kunuunsitu)	1.Hin baranne 2.Dubbisuu fi barreessuu kan danda'u 3.Sadarkaa 1 ^{ffaa} 4.Sadarkaa 2 ^{ffaa} 5.Sadarkaa kollejjii fi isaa olii	
G107	Sadarkaan barumsaa abbaan daa'imaa xumure inni guddaan meeqa?	1.Hin baranne 2.Dubbisuu fi barreessuu kan danda'u 3.Sadarkaa 1ffaa 4.Sadarkaa 2ffaa 5.Sadarkaa kollejjii fi isaa olii 99.Hin beeku	
G108	Hojiin kee maaliidha?(kan haadha ykn kunnunsitu)	1.Haadha mana 2.Hojii guyyaa guyyaatii 3.Qonnan bulaa 4.hojjeeta mootumaa 5.Barata/ttu 6.Daldala/tu 7. Kan biroo_____	
G109	Hojiin abbaa daa'imaa maali?	1.Hojii guyyaa guyyaatii	

		3.Qonnan bulaa 4.hojjeeta/tu mootummaa 5.Barataa/ttu 6.Daldala/tu 7.Others 99.Hin beeku	
G110	Giddugaleessaan galii ji'aa tilmamaan qarshii hammam argachuu dandeessuu?	Qarshii Itiyoopiyaatiin _____	
G111	Baayinii maatii keeysaanii kan mana keessaa wajiin jiraachaa jirtan meeqa? (lakkofsan barreessi)	Nama_____	
G112	Daa'imaan wagga shani gadi meeqa qabdan?(kan haadha tokko qofa lakkofsaan barreessi)	1.Tokko 2.Lamma 3.Sadii fi isaa olii	
G113	Kanan duraa daa'imni wagga shani gadi isiin jala duute beeytii?	1.Eyyee 2.Lakkii	
G114	Saalaa daa'ima filatame	1.Dhiiraa 2.Dhala	
G115	Umrii daa'ima (Ji'an Barressi)?	_____	
G116	Daa'imni keeysaan kan meeqaffatii?	1.Dhalaa tokkoffaa 2. Dhalaa lammaaffaa 3. Dhalaa sadaaffaa 4. Dhalaa afraaffaa fi isa oli	
G117	Daa'imni kun essaatti dhalatee?	1.dhaabata fayyatti 2.Manatti 99.Hin beeku	

Kutaa^{ffaa}: Gaaffilee Amaloota wal'ansaa Fayyaa Barbaaduu Haadha/Kunuunsituu Daa'ima Waa'ee
Dhukkuboota Daa'immanii Irraatti Beekamoo Tahan Ilaalatuu

Lakk. Gaaffii		Deebiiwwaan	Darbi gara
G201	Mucaan/daa'imni keeysaan ji'oota sadan darban keessatti dhukkuboota kanneen akka deemsiisaa, quufaa, haafuraa baafachuu dadhabuu fi leeydaan qabameera?	1.Eyyeen 2.Lakki	Yoo deebiin lakki ta,e gara G216 tti darbi
202	Mucaan keeysaan ji'oota sadan darban keessatti qufaan qabeera?	1.Eeyyee 2.Lakki	
203	Mucaan keeysaan ji'oota sadan darban keessatti rakkoo hafuura baafachuu dadhabuu mudateera?	1.Eeyyee 2.Lakki	
204	Mucaan keeysaan ji'oota sadan darban keessatti leeydaa ykn qaamni isaa ni owwaa ture?	1.Eeyyee 2.Lakki	
205	Mucaan keeysaan ji'oota sadan darban keessatti deemsiisan qabameera?	1.Eeyyee 2.Lakki	
206	Mucaan keeysaan ji'oota sadan darban keessatti qufaa, hafuura bafachuu dadhabuu, deemsiisaa fi leeydaa yookiin mallattoollee lama fi isa oli ni qaba ture?	1.Eeyyee 2.Lakki	
G207	Ji'oota sadan darban keessatti yeroo meeqa mallattoo dhukkubaa daa'ima kana irratti argitan?	1.Yeroo tokko 2.Yeroo lama fi isaa oli	
G208	Mallattoolee dhukkuba dhiheeniyatti daa'ima kana irratti mul'ateef gorsaa/	1.Eyyeen 2.Lakki	Yoo lakki tahe gara

	yaala barbaaddanii jirtu?		G213darbi
G209	Daa'ima kanaaf wal'ansaa/gorsaa fayyaa barbaaduuf jalqaba dhaabbata kami geessitan?(deebii tokko filaadhaa)	1.Dhaabbilee fayyaa ammayyaa 2.Naannoo amantatti 3.Iddoo xabalaatti 4.Oggeessa Fayyaa aadaatti 5.Wal'ansaa mana keessatiin offumaan wal'anee 6.Ajaja oggeessaa fayyaa malee dawaaw mana dawaatii bituun wal'anee	Deebiin yoo dhaabbata fayyaa ammayyaa hin tahin gara G211tti darbi
G210	Deebiin G209 dhaabbilee fayyaa ammayyaa yoo ta'e, jalqaba daa'ima kee gara dhaabbata fayyaa kamitti geessitan?	1.Hospitaalatti 2.buufata fayyaatti 3.Keellaa fayyaatti 4.Kiliniika dhuunfaatti	
G211	Daa'ima irraatti mallattoo dhukkuba argitani yeroo hangam turtanii wal'ansaa barbaadaniif?	1.Guyyaa tokko keessatti 2.Guyyaa 2-3 booda 3.Guyyaa 4-7 booda 4.Guyyaa 7 booda	
G212	Sababoonni gurguddoon daa'ima dhukkubsate gara dhaabbata fayyaa geessuun yaala barbaadaniif maal turan?(filannoo heddu filaadha)	1.Dhukkubni waan itti cimeef 2.Gorsa namoota biroo irraa argamen 3.Dhaabbatni fayyaa dhihootti waan argamuuf 4.Sodaa du'aatiif 5.Muxannoo duraanitiin 6.Dhukkubni kun dhaabbata kanatti ni fayyaa jedhe waan amanuuf 7.Gatiin dawaaw rakkishaa waan taheef	
G2013	Akka ilaalcha keessaniitti, hamma sadarkaa dhukkuba mucaa keessanii akkamitti murteessitan?	1.Salphaa 2.Giddugaleessaa 3.Hammaataa/kan itti cimeedha	

G214	Sababoonni gurguddoon dhaabbilee fayyaatti wal'aansa barbaaduu isiin dhoorkee maal fa'a dha? (Deebii hedduu filaa)	1.Qarshii yaala waan hin qabneef 2.Dhukkubni kun wal'aansa aadaatiin fayya jenne waan amaneef. 3.Dhukkubni kun wal'aansaa fayya ammayyaatiin hin fayyuu jenne waan amanuuf. 4.Dhaabbata fayyaa irraa waan faganuuf. 5.Ofiin murteessuu waaniin hin dandenyeeff 6.Hanqinni geejiba waan jiruuf 7.Turtii dhaabata fayyaa waan sodanuuf 8.Dhukkubni waan itti hin ciminiif 9.dhukkubni kun hin fayyuu jenne waan amanuuf.	
G2015	Sadarkaa cimina dhukkuba daa'imaa keessanni akkamitti adda baastan?	1.Amali daa'imaa yeroo jijiramee 2.Dhukkubni yeroo dheeraaf yoo irraa turee 3.Daa'imni harmaa luguu ykn nyaata nyaachuu yoo didee. 4.Mallattowwan dhukkubaa adda addaa altokkotti yoo irraatti mul'ate	
G216	Wal'aansa fayyaa argachuuf kan murteessu eenyuu?	1.Haadha 2.Abbaa 3.Lammanuutti 4.Warra akaakayyuu 5.Kanneen biro	

Kutaa 3^{ffaa}: Ilaalchaa haadholiin ykn kunuunsitootni daa'immanii barbaachisummaa wal'ansaa fayyaa yeroon barbaaduu , akkaata mallattoolee cimina dhukkubaa daa'imanni ittiin addaan baasanii fi sababoota dhukkuboota daa'imannii beekamoo tahan.

Lakk.Gaaffi	Gaaffiilee	Deebiiwwaan	Darbi gara
G301	Ijoolleen yeroo dhukkubsatan hatattamaan gara dhaabbilee fayyaa deemuu qabu	1.Eyyeen 2.Lakki	

	jettanii amantu?		
G302	Daa'imni garaa deemsisuu guyyummaa deemsisee keessatti gara dhaabbata fayyaa deemuu qaba jettani amantu?	1.Eyyeen 2. Lakki	
G303	Daa'imni afuura baafachuu dadhabe ykn saffisaan hafuura baafaatu guyyummaa san keessatti gara dhaabbata fayyaa deemuu qaba jettani amantu?	1.Eyyeen 2.Lakki	
G304	Daa'imni laaydaa qaama qabu guyyummaa sana keessatti gara dhaabbata fayyaa deemuu qaba jettani amantu?	1.Eyyeen 2. Lakki	
G305	Sadarkaa cimina dhukkuba daa'ima keessanni akkamitti addaan bahuu danda'a jettanni yaadu? (deebii heddu filaadha)	1.Amali daa'ima yeroo jijiramee 2.Dhukkubni yeroo dheeraaf yoo irraa turee 3. Daa'imni harmaa luguu ykn nyaata nyaachuu yoo didee. 4.Mallattowwan dhukkubaa adda addaa altokkotti yoo irraatti mul'ate	
G306	Dhukkuba ijoollummaa kanaaf sababni maal ta'uu danda'a jettanii yaaddu? (deebii heddu filaadha)	1.Abbarsaa Rabbiiti 2.Lubbu qabeeyii xixiqqoo ijaan hin mul'aneen ykn jermiidhaan 3.Ija hamaa ykn buudaadhaan yoo ilaalaman 4.Bishaanii fi nyaata faalameen 5.Ilkaan jalqabaa baasuu daa'imani 6.Hanqinaa nyaata 7.Kan biroo	
G307	Waa'ee mallattoolee cimina dhukkuboota daa'immanii beekamoo ta'an ni beektu?	1.Eyyeen 2.Lakki	Yoo deebiin 'Lakki' tahe ,gara G401 darbi
G308	Yoo deebiin G 307 'eyyeen' ta'e, maddi oddeeffannoo keessani maaliidha? (deebii hedduu filaadhaa)	1. Oggeeyyii fayyaa irraa 2. Radiyoonii	

		3.Televijinii 4.Maatii 5.Ollaa irraa 6. kan biro ibsii.....	
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Kutaa 4^{ffaa}: Gaaffiilee Dhaabbata Fayyaatiin Walqabatan

Lakk. Gaaffi	Gaaffiiwwaan	Deebiiwwaan	Darbi gara
G401	Dhaabbanni fayyaa ammayyaa naannoo kanatti dhiyoo jiru jiraa?	1.Eyyeen 2.Lakki	
G402	Dhaabbata fayyaa kana milan dhaquuf mana keeysan irraa tilmamaan daqiiqaa meeqaa deemsisaa?	1. Daqiqaa 30 gadi 2. Daqiqaa 30-60 3. Daqiqaa 60 oli	
G403	Dhaabbata fayyaa ammayyaa kamtu isiniitti dhihaata?	1.Keellaa fayyaa 2.Buufata fayyaa 3.Hospitaala 4.Kilinika dhuunfaa	
G404	Tajaajilli eegumsa fayyaa dhaabbati fayyaa kun kennu gahaadha jettanii yaaddu?	1.Eyyeen 2.Lakki 99.Hin beeku	Yoo deebiin ‘eyyeen’f i hin beeku tahe, gaaffanoo kee xumuri

G405	Deebii G303 tiif ‘Lakki’ yoo ta’e sababni inni guddaan maali?(deebii hedduu filuu dandeessu)	1.Gatiin qoricha waan dabaleef 2.Oggeessotni Fayyaa dhukkubsata waliin hariiroo gaarii waan hin qabneef 3.Hanqinni oggeessa fayyaa waan jiruf 4.Hanqinn sirna ol-erginsaa waan jiruf 5.kan biro	
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ANNEXIV

AnnexIV.A

Hosmer and Lemeshow Model for Goodness of Fit Test

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	5.681	8	0.683

AnnexIV.B

Multi-collinearity Diagnostic Test

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Age of caregivers in years	0.909	1.100
	Educational status of mothers or caregivers	0.903	1.108
	Number of under-five child	0.838	1.193
	Sex of selected child	0.840	1.190
	Did your child have cough within the past three months?	0.677	1.477
	Did your child have fast or difficulty of breathing in the past three months?	0.866	1.155
	Did your child have diarrhea within the past three months?	0.295	3.394
	Perception of mothers or caregivers regarding severity of illness	0.863	1.158
	Perception on importance of early seeking treatment?	0.279	3.587

Research Ethics Approval Letter



Salale University
Institutional Research Ethics Review Committee (SIU-IRERC)

Date: 12/10/2016

Ref. No: SIU-IRERC-206/10/16

To: Shimelis Alemayehu

Subject: Research Ethics Approval Letter

This is to kindly notify you that your project protocol entitled "Mothers' care-seeking behavior for common childhood illness and its predictors at Tulo district, West Harerghe, Ethiopia, 2024." has been approved for the intended one-year period of implementation. The review process of the Research protocol has been carefully conducted by Salale University institutional research ethics review committee (SIU-IRERC). The protocol is ethically sound to be implemented through adhering to the research ethics principles during the implementation. Thus, the committee is pleased to inform you that your study protocol has been approved.

The committee would like to remind you that the research principal is expected to submit a progress report of the research at least once before the end of its implementation. The committee also looks forward to receiving the final technical report and recommendations that will be generated from the study.



Sincerely,

Solomon F. Tekleweld
Salale University 12/10/16
Chairperson

CC:

- Salale University Institutional Research Ethics Review Committee
- Salale University Health Sciences College CARD

DECLARATION

This is the thesis proposal prepared by Shimelis Alemayehu, entitled: Prevalence of Health Seeking Behaviour For Common Childhood Illness and Associated Factors Among Mothers/Caregivers Of Under Five Children In Tulo District, West Harerghe Zone, Oromia, Ethiopia. I declare and confirm as it is my own-work by my signature below and submit to Salale University College of Health Science, Department of Nursing in partial fulfilment of the requirement for master's degree in Pediatrics and Child Health Nursing (PCHN) 2024 year with the regulations of the university and meet standards with respect to originality and quality. This thesis has not been presented for a degree in any other university, and that all sources of materials used for the thesis have been well acknowledged.

Investigator Name Signature Date of submission

1. Shimelis Alemayehu _____ Decembe/2024

This thesis has been submitted for examination with my approval as a University Advisor.

Advisors Name	Signature	Date
1. Mathewos Mokonnen (BSc, MSc, Ass't .Prof.)	_____	December /2024
2. Work Doni (BSc, MSc)	_____	December /2024