

**ADDIS ABABA UNIVERSITY**  
**COLLEGE OF HEALTH SCIENCE**  
**SCHOOL OF ALLIED HEALTH DEPARTMENT OF**  
**NURSING & MIDWIFERY**

**ASSESSMENT OF KNOWLEDGE, ATTITUDE, PRACTICE AND FACTOR  
AFFECTING MOTHERS REGARDING PNEUMONIA AMONG UNDER FIVE  
CHILDREN AT LIDETA SUBCITY, ADDIS ABABA, ETHIOPIA, 2015.**

**BY**  
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**THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH  
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**ADDIS ABABA, ETHIOPIA**

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## **APPROVAL BY THE BOARD OF EXAMINERS**

This thesis by Damtew Bilata is accepted in its present form by the Board of Examiners as satisfying thesis requirement for the Degree of Master of Science in Child Health Nursing.

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## ABSTRACT

**BACKGROUND:** Control of under-five child pneumonia is a major problem of public health in developing countries. Effective health education program is required to be designed in accordance with KAP of society. Mothers are the primary care giver, if they would possess adequate knowledge regarding prevention of pneumonia through information booklet then they can apply the same in their practice.

**OBJECTIVE:** To investigate KAP and factors affecting knowledge, Attitude and practice of mothers on pneumonia among under five children at Lideta sub city, Addis Ababa, Ethiopia, 2015.

**METHODS:** Institutional based cross-sectional study was employed among mothers who have under five children in the selected health centers in Lideta sub city and 229 study subjects were selected randomly from the health center. Within selected health center interview to mothers, was performed using a structured questionnaire. The collected data was analyzed, statistical significance of  $P < 0.05$  with 95% CI, Multivariate analysis was also checked to control possible confounders using SPSS version 20.

**RESULT:** The finding of this study showed that mothers and care takers on under five children with pneumonia showed satisfactory practice was 32.8%, 95% CI (26.2, 38.9), positive Attitude was only 15.7%, 95% CI should (10.9, 20.5) and knowledge was 44.1%, 95% CI (38.0, 51.1). Income and age of mother was statically significant (AOR=2.08, 95% CI=1.16, 3.73) and (AOR=5.49, 95% CI=2.51, 12.01) respectively.

**CONCLUSIONS:** less than half percent of respondents were not knowledgeable and didn't practice, on under five children with pneumonia.

**RECOMMENDATIONS:** Effective and strong health education through strengthening the existing health extension program it should also include targeting mothers and care takers under five children. community health workers, health professionals teachers

**KEY WORDS:** Knowledge, Attitude and Practice, pneumonia



## **LIST OF ABBREVIATIONS/ ACRONYMS**

**AIDS**-Acquired Immune Deficiency Syndrome

**ALRI**-Acute Lower Respiratory Infection

**AOR**- adjusted odds ratio

**ARI**-Acute Respiratory Infection

**CI**-Confidence Intervals

**COR**-Crude odds ratio

**DC**-Data Collectors

**FMOH**-Federal Ministry of Health

**HC**-Health Center

**ICCM**-Integrated Community Case Management

**IMNCI**-Integrated Management of Neonatal and Childhood Illness

**KAP**-Knowledge, Attitude and Practice

**PI** - Principal Investigator

**SPSS**-Statistical Package for Social Science

**SRS**-Simple Random Sampling

**UNICEF**-United Nation Children's Fund

**WHO**-World Health Organization

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# 1. INTRODUCTION

## 1.1. BACKGROUND

Pneumonia is the inflammation of the lung parenchyma characterized by cough, sore throat, running nose, fast & difficulty breathing, wheezing, fever, irritability, chest pain, chill, tachycardia etc. World Health Organization (WHO) has classified pneumonia as severe or very severe based on clinical presentation. It is one of the major reason for which children are brought to the hospitals and health facilities. Most children have 3 to 5 attacks of ARI in each year. KAP in Prognosis of pneumonia is good in early diagnosis & early initiation of treatment in appropriate time otherwise leads to serious complications and may have fatal outcome. As prevention is better than cure, the rate of incidence can be reduced by giving adequate knowledge regarding the risk factors, etiology, clinical manifestation, prevention& when to seek medical help (1, 2).

Approximately 150 million new cases of pneumonia occur annually among children younger than five years worldwide, accounting for approximately 10-20 million hospitalizations (3). Most children experience ARI four to six times in a year. Pneumonia is the main cause of death in children under 5 years old worldwide that is even more than the combination of AIDS, malaria and measles. World Health Organization (WHO) has classified pneumonia as severe or very severe based on clinical presentation (4) Although the mortality rate has declined since 1970, not all countries have benefited to the same extent; Mortality rate in children under 5 year olds with low-income families in under developing countries are about ten times higher than their peers in developed countries (5, 6, 7). The pneumonia is the most hazardous form of acute respiratory infections if not treated properly. The estimated proportion of deaths in which under nutrition is an underlying cause is roughly similar for diarrhea 61%, malaria 57%, pneumonia 52%, and measles 45% (2, 3, and 4).

About 95% of childhood pneumonia (under 5 years old) cases are in under developed countries where the immune systems of children are weak because of malnutrition and infectious diseases. One out of five mothers cannot distinguish the pneumonia from other diseases because of their similar symptoms of such as fever and cough. There have been few studies conducted to evaluate the Knowledge, Attitude and Practice (KAP) of mothers regarding pneumonia children (8).

Early diagnosis and treatment of pneumonia, and access to health care, will save lives, this strategies must target low income communities. The increased use of pneumonia vaccines, particularly in low income countries has led to progress against the disease, but inequities exist even in countries with wide coverage. UNICEF's Supply Division has today put out a call to innovators for new, improved and more easily affordable respiratory rate timers to aid in the timely recognition and management of pneumonia [8]

One simple treatment has had great success: trained community health workers give sick children the antibiotic amoxicillin in a child-friendly tablet form, as part of an integrated case management program at the community level. Scaling up the availability of similar inexpensive medicines will help to reduce the treatment gap especially among hard to reach populations (8,9)

Simple measures such as early and exclusive breastfeeding; hand washing with soap; vaccination; and provision of micronutrients will also reduce the incidence of pneumonia. Scheduling, preventing and treatment of ARI in children require the accurate information about Knowledge, attitude and practice of mothers and family's members. Therefore, the present study aims to undertake KAP of mothers regarding pneumonia in under five children in one of the ten sub-cities of Addis Ababa specifically in Lideta sub city (9).

## **1.2. STATEMENT OF THE PROBLEM**

Pneumonia is the number one infectious killer of children under age 5 globally, killing an estimated 935, 000 children each year, that's more than 2500 per day. Pneumonia causes 15% of all deaths in children under age 5 worldwide out of which 2% are new born. Under five Children in poor and rural communities are most affected. Under five Children living in these top 15 high burden countries by estimated number of pneumonia deaths for children under age 5 in 2013( India (174,000), Nigeria (121,000), Pakistan (71,000), DRC (48,000), Ethiopia (35,000), China (33,000), Angola (26,000), Indonesia (22,000), Afghanistan (20,000), Kenya (18,000), Bangladesh (17,000), Sudan (17,000), Uganda (16,000), Niger (15,000), Tanzania (14,000)). [10]

In developing countries mothers (care takers) often do not practice behavior that will prevent infant and child health problem before they arise, children may not be treated properly when they become sick because many families do not have access to health facilities or, even they do, do not seek care regularly (9). Due to lack of awareness of the symptoms and sign of pneumonia and their consequence or by underestimating their effects, most mothers or care takers may delay to bring their children, who suffer from acute respiratory infection to health facilities in case of neonates who usually die of pneumonia, may not be totally brought (10).A study in Guatemala showed families are much more likely to seek out a health care provider when a child experiencing fever and gastrointestinal symptoms than when suffering from respiratory and other symptoms and when a mother perceives the illness to be serious (11).

People's perception and explanation of ill health is an important basis or health action strategies. Perception of mothers (care takers) as regard to acute respiratory infection in their under five children was found to be low. Most mothers have minimum knowledge of the symptoms and signs of acute respiratory infection and negative attitude towards the use of medication from health services and provision of supportive care at home. Although various acute respiratory infection related illness including pneumonia are more frequently occur in their children many mothers and other care takers were recognized as they brought for health care too late usually after home treatment with traditional medicine (12).

Several studies have shown association between maternal education and child survival in south Brazil. A study, with acute respiration showed infant mortality rate from acute respiratory infection was 14 per 1000 live births in mothers with no schooling 7 in those with 5-8 years of schooling and 1 per 1000 in those with over eight years of schooling (13).

In Ethiopia pneumonia morbidity is particularly associated with parental factors. The research done in Guatemala and Uruguay in this regard revealed that among parental factors illiterate mothers predisposed the under-five to higher illness rate maternal education was found to be a significant factor for morbidity (14).



### **1.3 SIGNIFICANCE OF THE STUDY**

Studying KAP of mothers regarding pneumonia among under five children and its determinants in Addis Ababa helps to pinpoint factors which facilitate or inhibit the uptake of recommended health services regarding the mitigation measures to alleviate the KAP related health problems for the acute death of under five children. The findings from this study may possibly identify determinants related to KAP of mothers regarding pneumonia.

It may also bring facts to all stakeholders that may establish and demonstrate transparency and shared responsibility for which they should be accountable and to invest their potential and actual available resource in acceptable approach in line with accepted standards for basic life support for children under five through their mothers. So intervention could be made which enhance ownership and commitment among all the concerned bodies under the level of influences that the findings of this study could impose.

Furthermore the study will possibly generate information in the area of the topic for large scale researchers to investigate further empirical evidences to control those factors attributable to low KAP of mothers regarding pneumonia in the study area.

## 2 LITERATURE REVIEW

### 2.1. KNOWLEDGE

A study done in Myanmar regarding mothers knowledge on acute respiratory infection showed that from 300 mothers urban and rural in the study 1.5% of mothers knew microorganisms were the cause of acute respiratory infection ( urban= 2%, rural 1 % ), nearly 70 % of the mothers know that fever, cough and difficulty breathing were the symptoms of pneumonia. When an important danger sign chest in drawing was probed only 13.5% of mothers (urban=13%, rural 14%) had seen or heard that sign (1, 2).

A similar study done on knowledge of mothers on pneumonia in Philippines, Pakistan showed that mothers, care takers, tend to list more than one symptom as a sign of severity of acute respiratory infection. The leading signs are 50-55% of fast breathing, chest in drawing 44%, continuous /fast cough 44% phlegm 44%, fever and cough were spontaneously mentioned by Pakistan mothers of children with pneumonia or common cold however when questioned about to list of symptoms their reporting of fast breathing and chest in drawing highly correlated Gambian mothers often recognize fast breathing a sign of severe illness (24). Mothers in Butajira do not established term for an illness which corresponding the clinical pneumonia. Despite describing its symptoms with vague term “Dingetegna” meaning sudden illness, they were not familiar with fast breathing a symptom of serious illness (3).

The study done Thailand in found mothers were predominantly primary school graduates (37.14 %). The majority worked as laborer (39.29 %) with medium level of family income per month (87.86 %). Around 66% of the mothers had fair knowledge about pneumonia. From this result, it was found that only a few mothers answered all the questions correctly in terms of simple signs and symptoms of pneumonia (7%) and around 21% of the mothers answered all the questions correctly in terms of cause and factors related with pneumonia (4,5,6).

Around 81% of the mothers had good perception and only a small number of mothers gave correct answers for all the statements, which was only 7% of all the mothers. Finally, no significant associations were found among the occurrence of pneumonia, mother's knowledge and mother's perception. Lack of knowledge among mothers about simple signs and symptoms of pneumonia, and also the lack of knowledge about its causes and factors related with pneumonia become important findings of this study.(6)

Studies conducted in Este town and the surrounding rural kebeles in Northwest Ethiopia revealed that 92% of the care givers do not have adequate knowledge as what causes acute respiratory infection and 57.8% of the mothers do not know the signs and symptoms of pneumonia, mothers (care givers) who have attended literacy campaign and who have completed, grade 1-3 have better knowledge as compared to those who are illiterate most mothers in Gondar recognized that respiratory rate (77.3%) high fever, (76.5%) and decreased feeding (62.8%) were important sign of pneumonia (7).

## **2.2. ATTITUDE**

AUNGT et al. described that among 300 mothers in the study 90% mothers agree that they were alarmed when their children had either fast breathing or noisy breathing (16). McneeA et al. stated that cough is the leading cause of acute respiratory infection of child hood acute respiratory infection in Bohol. According the local belief a sprain or dislocation of tissue or bones in the chest or back causes cough. Most mothers (care takers) of children with acute respiratory infection often do not provide care, have desire to try herbal medicine or antibiotic beforehand or had confidence in traditional healer (7).

Tupasi TE, stated that mothers of children with acute respiratory infection generally perceived cough as ordinary occurrence and felt confident about treating themselves and showed poor ability to discriminate between pneumonia, simple cough and colds (8)

Goldman N. and henveline indicated that health care providers are most frequently sought by mothers of children with acute respiratory infection on 2<sup>nd</sup> day illness and least likely after 5<sup>th</sup> day of illness (9)

Woldemichael showed that four hundred and 89.4% of the care givers perceive pneumonia as not dangerous and 16.1% prefer to take their children to local healer and care givers with high economic status have less favorable attitudes compared to those with low economic status old and middle aged care givers (mothers) were likely to have negative attitude as compared to illiterate givers. Mothers who attended literacy campaigns and completed grade 103 have unfavorable attitude (10)

Teka T. and dagnaw M. showed that traditional practices were predominant interventions proposed by the mothers from mild acute respiratory infection ( E.G cold, sore throat, ear discharge).

Most 85.6% mothers would take their children with a sore throat to traditional healer for tonsil extraction, hazardous practice specifically; illiterate mothers were more likely to seek this treatment for their ill child than literate mothers (91%) versus 76%) (11)

### **2.3. PRACTICE**

Mothers (care takers) undesirable practices of self-medication for children with acute respiratory infection was common both in urban and rural mothers (urban 59 % rural 61.5 %) and western medicine was dominant (urban= 69.4%, rural 56.09%) in home care about 30% (urban 29%, rural 33%) of mothers gave usual amount of food while only thirty (10%) mothers gave increased amount fluid to children with acute respiratory infection (12).

Children with cough initially treated with herbal mixture. Traditional healers who specialized in massage diagnose and treat paying(back) so mothers (care takers) first take children with acute respiratory infection to such a healer, if parents perceive that a child not improving, then they seek treatment from the health center (13)

From 483 urban mothers and 3128 rural mothers included in the study 10% urban, 4% rural mothers referred their sick children with pneumonia for medical care 12% rural and 10% urban mothers did nothing, while most mothers in both groups(80% urban and 84% rural) gave medicine without consulting a health worker. Herbal medicines were used more frequently by rural mothers. While antibiotic more often by urban mothers (14)

A child with measles should never taken to a health institution. But a child with pneumonia, few mothers said they would take to health center. Other would treat with special root called “Dinge tegnaRoot” or coffee, Tea, Egg and cow milk. Massaging of the chest with butter also suggested one mother said blood should sucked from child nipple (15)

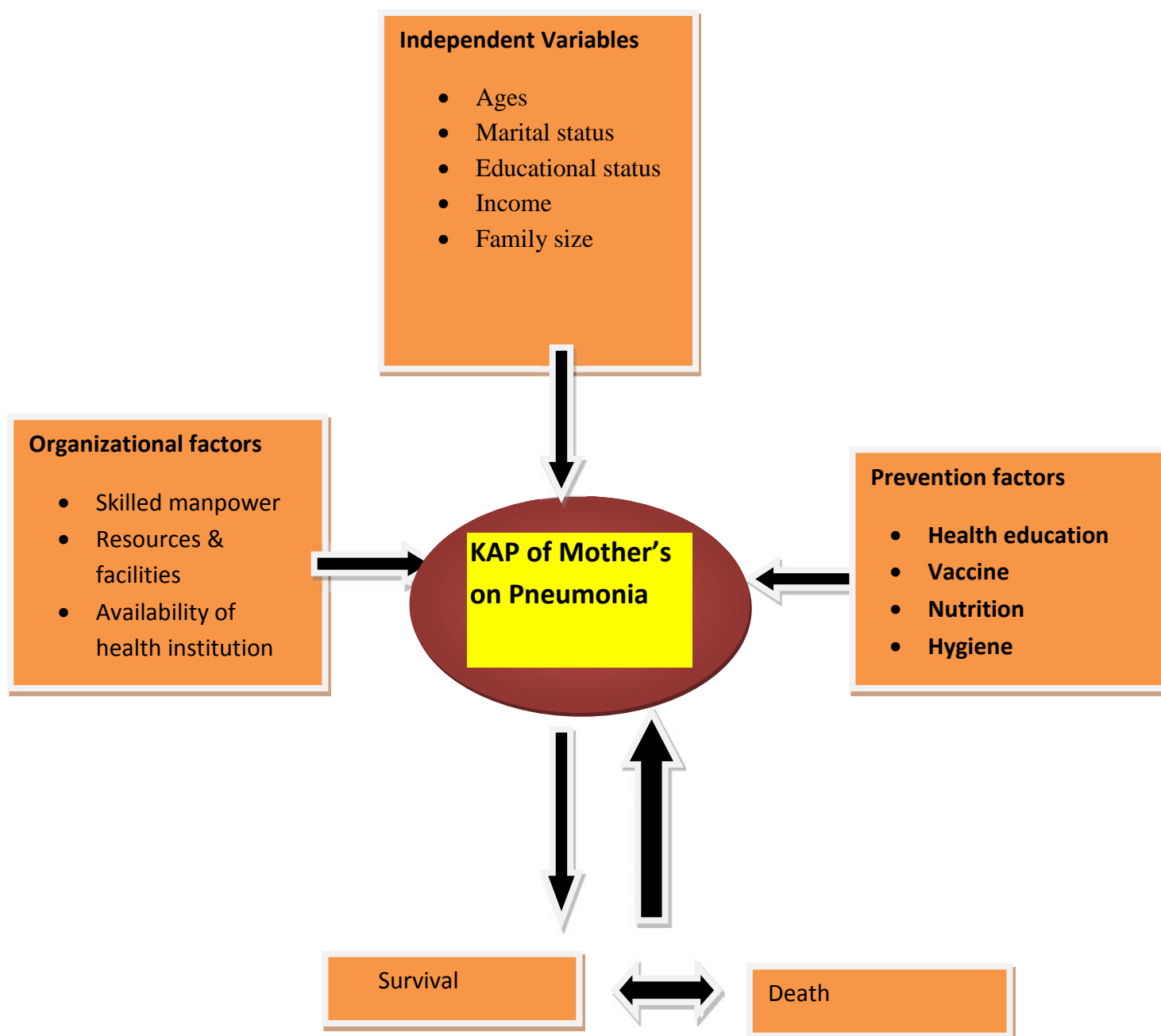
In the study done in Gondar showed that from 132 mothers 35% of the mothers take their children with symptoms of pneumonia to nearby health center and 64.4% mothers were taking to traditional healer and apply to the chest via massage at home (15,16)

Most of the rural mothers did not have adequate or appropriate knowledge or perception about childhood pneumonia and did not seek proper care even when their child was suffering from severe pneumonia or very severe pneumonia or very severe disease.

Health education programs at household or community level or mass education campaigns should be implemented to disseminate knowledge about the signs and symptoms including danger signs of pneumonia requiring immediate treatment at facility level and preventive measures against childhood pneumonia.(17)

Across sectional study carried out in Imam Zaman Health (Tehran, Iran) showed Fifty-three mothers did not do any therapeutic action before visiting doctors. The most common actions were utilizing cold pills and syrup (22.1%), watery soup (21.6%), acetaminophen syrup (9.6%) and diphenhydramine (7.3%) while only 5% used antibiotic. Mothers mentioned the reason of these performances as a prevalence of common cold (37.6), fever (26%), rhinorhea (12%); chest and throat pain (8.5%) and caught (4.3%).There was not any significant correlation between KAP of mothers and their occupation type, education level, employment status, university degrees and the number of children in the family(18)

## 2.4. CONCEPTUAL FRAMEWORK



*Figure1: Schematic presentation of the Conceptual Framework developed by principal investigator for possible association of factors with KAP of mothers' regarding Pneumonia among under five children, 2015.*

### **3 OBJECTIVES OF THE STUDY**

#### **3.1. GENERAL OBJECTIVE**

- To investigate KAP and factors affecting knowledge, attitude and practice of mothers on pneumonia among under five children at Lideta sub city, Addis Ababa, Ethiopia,2015.

#### **3.2. SPECIFIC OBJECTIVES**

- To describe knowledge of mothers on pneumonia among under five children at Lideta sub city ,Addis Ababa, Ethiopia.
- To describe Attitude of mothers on pneumonia among under five children at Lideta sub city ,Addis Ababa, Ethiopia. .
- To describe Practice of mothers on pneumonia among under five children at Lideta sub city ,Addis Ababa, Ethiopia. .
- To identify factors associated with KAP on pneumonia among under five children at Lideta sub city ,Addis Ababa, Ethiopia.

## 4 METHODS AND MATERIALS

### 4.1. STUDY AREA

Lideta Sub city is found in Addis Ababa city administration of Ethiopia. It is bordered on the South by Nifas Silk lafto, on the West by Kolfe keraniyo, on the North by Arada sub city, and on the East by Kirkos, it have 10 woredas. Based on the 20013/14 Census conducted by the Central Statistical Agency of Ethiopia, it has a total population of 201,713, of whom 105,441 female 96,272 men and a total of under five children 14,523; with an area of 1,204.4 square kilometers, Lideta Sub city has a population density of 210.64. Within the sub city, there are 05 health centers, 03 governmental Hospital and 03 private Hospital and 53 private clinics.

### 4.2. STUDY PERIOD

The study was conducted from **March, 2015 to June, 2015**

### 4.3. STUDY DESIGN

### 4.4. STUDY POPULATION

The study population of this study was all mothers who came to integrated management of neonatal and childhood illness (IMNCI) during data collection time

### 4.5. SAMPLING TECHNIQUE AND SAMPLE SIZE

#### 4.5.1 Sample size calculation

The sample size required for the study was conducted using single population formula:

$$n = \frac{(Z \alpha/2)^2 * P (1-P)}{D^2}, \quad n = \frac{(1.96)^2 * 0.161(1-0.161)}{(0.05)^2} = 208$$

Where n=the required sample size, Z= standard score corresponding to 95% CI =1.96P= prevalence of pneumonia among under five children was 16.1% (6),and D= margin of error 5%

By adding 10% none response rate the required sample size was =229. Therefore, the final sample size was 229.





#### 4.6. SAMPLING PROCEDURES

Three of the health centers was selected by using simple random sampling. The desired number of samples for the study was proportionally allocated. Individual study participants were selected using simple random sampling techniques.

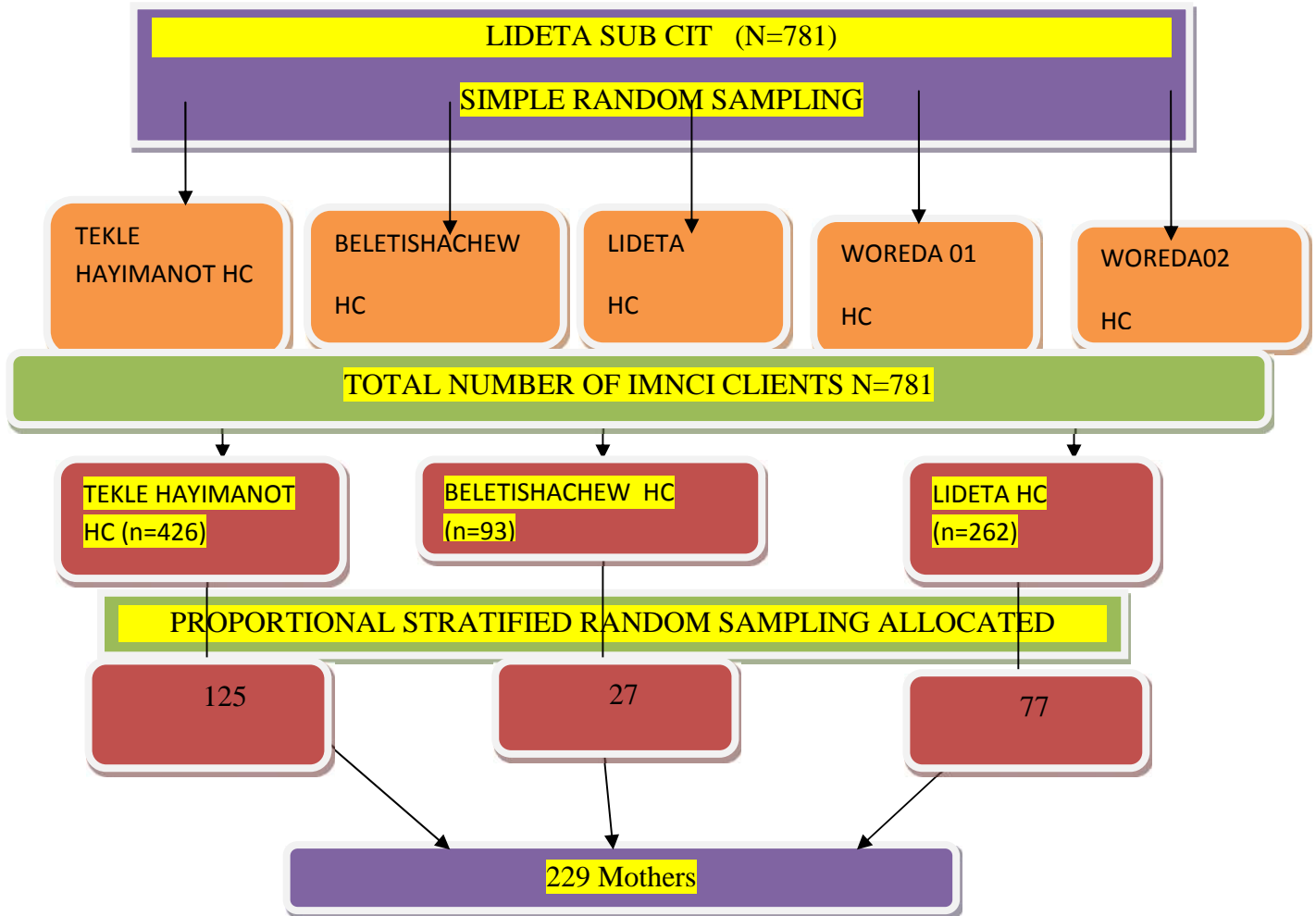


Fig.2.Schematic presentation of sampling procedure

#### **4.7. DATA COLLECTION**

The data collection was conducted from March 2015, to April; 2015. Data was collected by interviewing the respondent using structured questionnaires. The questionnaire was developed taking in to consideration the research thematic issues and its easiness to the responding mothers. The questionnaire was initially prepared in English and then translated to Amharic. The Amharic version was translated back to English to check for any inconsistencies or distortion in the meaning of words or concepts.

Pre-test of 10% was done in Shiromeda health center a week before the start of actual data collection; and based on the finding from the pre-test, the questioner was revised and adopted and time needed for interview was estimated. Data collectors were residents of out of the study area. All data collectors and supervisors was fluent speaker of Amharic language. A team of eight data collectors who had diploma in health related subjects and an experience of working with similar surveys. The data collectors and supervisors was taken training for two days on interviewing techniques, contents of questionnaires, disciplines the right of the respondents during data collection, and approach to the interviewees. Field supervisors together with the principal investigator ensured the quality of the data, through continuous spot checking of the interviewers, by checking the completed questionnaire for missed response and for inconsistent information. Discussion was also held for possible minimization of biases

#### **4.8. DATA ANALYSIS**

Data was entered by Epi Info version 7 and cleaned and analyzed by SPSS version 20. Descriptive statistics; using frequencies, tables, graphs, mean and standard deviations was determined to present the information. Bivariate logistic regression analysis was also conducted to identify associated factors of KAP on pneumonia. Multivariate logistic regression analysis was also conducted to control confounders. A p-value of  $< 0.05$  was considered as statistically significant.

#### **4.9. ETHICAL CONSIDERATION**

Ethical clearance and approval was obtained from Addis Ababa University department of nursing and midwifery. The necessary permission to undertake the study was also obtained from Addis Ababa city administration Lideta sub city health office.

The researcher was value the local culture and traditions, and dealt with every participant in the study with respect and dignity.

In every situation, the established rights of research participants were also protected. People was not been forced into participating in the research, which is the fundamental of the principle of voluntary participation in research ethics.

Prospective research participants was fully informed about the procedures involved and gave their consent to participate using a form attached in the annex. The respondents were at least asked for an oral consent in local language and the questions asked to them were also in simplified language. This research guarantees the participants confidentiality; the participants were assured that identifying information would not be made available to anyone who was not directly involved in the study.

## **4.10. VARIABLES**

Independent variable

- Ages
- Marital status
- Educational status
- Income
- Family size
- Hygiene

Dependent variables

- Knowledge,
- Attitude and
- Practice on pneumonia.

## **4.11. INCLUSION AND EXCLUSION CRITERIA**

### **4.11.1. INCLUSION CRITERIA**

- All mothers who came to integrated management of neonatal and childhood illness(IMNCI) with under five children during the study period.

### **4.11.2. EXCLUSION CRITERIA**

- All Mothers who came to integrated management of neonatal and childhood illness (IMNCI) with children more than five years old during the study per

#### **4.12. OPERATIONAL DEFINITIONS**

**KNOWLEDGE;**-knowledge was scored as 1 for those respondents who answered correctly and 0 for incorrect answer. If respondents score  $\geq 5$  out of 9 questions they were considered as knowledgeable and if it was  $< 5$  they were considered as Not knowledgeable.

**ATTITUDE;** -Attitude was scored as 1 for those respondents who answered correctly and 0 for incorrect answer, respondents with score of  $\geq 4$  out of 6 was considered as positive attitude and if scored  $< 4$  they were considered as negative attitude.

**PRACTICE;** -practice was scored as 1 for those respondents who answered correctly and 0 for incorrect answer. If respondents score  $\geq 3$  out of 5 questions they were considered as satisfactory practice and if it was  $< 3$  they were considered as unsatisfactory practice.

## 5. RESULTS

In this study the response rate was 100%.

**Table 1: Socio-demographic characteristics of Mothers and Care Takers towards the Treatment of Children with Pneumonia, Ethiopia, 2015 (n=229)**

Variables		Frequency (n=229)	Percent (%)
Age in years	20-25	64	27.9
	26-30	86	37.6
	31-35	53	23.1
	36-40	20	8.7
	>=41	6	2.6
Marital status	Married	204	89.1
	Single	17	7.4
	Divorced	6	2.6
	Widowed	2	0.9
Religion	Orthodox	150	65.5
	Muslim	55	24
	Protestant	24	10.5
Ethnicity	Amhara	84	36.7
	Gurage	60	26.2
	Oromo	53	23.1
	Tigre	19	8.3
	Other	13	5.7
Occupation	House wife	124	54.1
	Employed	105	45.9
Income	less income (<500 EBR)	44	19.2
	High income (>=500 EBR)	185	80.8
Educational	Illiterate	36	15.7

status	Educated	193	84.3
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## 5.2 Practices of Mothers and Care Takers towards the Treatment of Children with Pneumonia

**TABLE: 2. Distributions of mothers and care takers practice on providing extra food and fluid to child with pneumonia in the study area health centers.**

Amount	Frequency	Percent(%)
Increased amount	102	44.5
As usual	101	44.1
Less amount	26	11.4
Total	229	100.0

**Table 3 Distribution of mothers and care takers health seeking practice with pneumonia can be treated.**

Health seeking practice	Frequency	Percent(%)
Self-treatment at home	2	0.9
At health institutions	225	98.3
Traditional healing	2	0.9
Total	229	100.0

**Table 4. Distributions of mothers and care takers self practice antibiotic provision to a child with pneumonia.**

Self practice of antibiotic provision	Frequency	Percent
Yes	197	86.0
No	32	14.0
Total	229	100.0



**TABLE5: Attitude of mothers and care takers on pneumonia of under five years of age (n=229)**

QUESTIONS	STRONGLY AGREE	AGREE	DON'T AGREE	STRONGLY DISAGREE	INDIFFERENT
Pneumonia is dangerous	19(8.3%)	9 (3.9%)	52(22.7%)	144(62.9)	5(2.2%)
Brought immediately to health institution	142(62%)	82(35.8%)	3 (1.3%)	2 (0.9%)	0
Isolation of a child	30(13.3%)	46(20.1%)	75(32.8%)	67(29.8%)	11(4.8%)
Traditional healing	10(4.4%)	50(21.8%)	85(37.1%)	76(33.2%)	8(3.5%)
Mothers treatment	65(28.4%)	105(45.9%)	30(13.1%)	25(10.9%)	4(1.7%)
Antibiotic treatment of pneumonia	81(35.4%)	76(33.2%)	51(22.3%)	21(9.2%)	0

**TABLE 6. Distribution of mothers and care takers knowledge on loss of appetite as a sign of pneumonia.**

Responses	Frequency	Percent	Cumulative Percent
I know	124	54.1	54.1
I do not know	68	29.7	83.8
I am not sure	37	16.2	100.0
Total	229	100.0	

Regarding the knowledge of mothers and caretakers about the loss of appetite as a sign of pneumonia out of the 229 total mother and care taker respondents of this study, 124(54.1%) knew about it, 68(29.7%) did not know about it, and 37(16.2%) were not sure yet about it.

### **5.5 Knowledge, Attitude and Practice of mothers and care takers on under five children with pneumonia**

The finding of this study showed that Mothers and care takers on under five children with pneumonia with Satisfactory practice was 32.8%, 95%CI(26.2, 38.9),this is less number and their knowledge and attitude should be increased in the community by HEW and health education through different mechanisms should be strengthen by health professionals.

Result of this study also revealed that positive Attitude of mothers and care takers towards under five children with pneumonia was only 15.7%, 95%CI(10.9, 20.5) as mothers have more attitude they will aware of the importance and they practice it.

Furthermore, the finding also revealed that the knowledge level of mothers and caretakers on under five children with pneumonia was 44.1%, 95%CI (38.0, 51.1).knowledge is key so as to increase the practice.

### **5.6 Factors on Knowledge, Attitude and Practice of mothers and care takers on under five children with pneumonia.**

Age, income, educational status, occupation, and marital status was checked for statistical association on bivariate logistic Regression with 95% of confidence interval and  $P < 0.25$ . To control the possible confounders multivariate logistic regression was done with 95% of Confidence interval and  $P < 0.05$  and age and income was statistical associated. And the finding showed that Age was statistically associate with Knowledge, Attitude and Practice of mothers and care takers on under five children with pneumonia.

The odds of age 26-30 years was 2.08 (AOR= 2.08, 95% CI= 1.16, 3.73) times higher than with other age groups for Knowledge, Attitude and Practice of mothers and care takers on under five children with pneumonia and The odds of income of 500 EBR and above was 5.49 times higher than compared to those less than 500 EBR for KAP of mothers and care takers on under five children with pneumonia (AOR= 5.49, 95% CI= 2.51, 12.01).

## **6:DISCUSSION**

### **6.1 GENERAL ISSUES**

This study aimed at exploring the knowledge, attitude and practice of mothers and care takers on pneumonia of under five children and find out a possible solution in developing adequate knowledge, positive attitude and favorable practice.

A global study conducted in 2010 revealed that approximately 150 million new cases of pneumonia occur annually among children younger than five years worldwide, accounting for approximately 10-20 million hospitalizations (10). Most children experience ARI four to six times in a year. Pneumonia is the main cause of death in children under 5 years old worldwide that is even more than the combination of AIDS, malaria and measles. World Health Organization (WHO) has classified pneumonia as severe or very severe based on clinical presentation (4). Although the mortality rate has declined since 1970, not all countries have benefited to the same extent; Mortality rate in children under 5 year olds with low-income families in under developing countries are about ten times higher than their peers in developed countries (5, 6, 7). As studies indicated that pneumonia is the most hazardous form of acute respiratory infections if not treated properly. The estimated proportion of deaths in which under nutrition is an underlying cause is roughly similar for diarrhea 61%, malaria 57%, pneumonia 52%, and measles 45% (2, 3, and 4).

It is also examined that acute lower respiratory infections (ALRI), particularly pneumonia are the leading and largest single cause of mortality among <5-year-old children in developing countries (7). Acute respiratory infections (ARI) especially pneumonia caused 1.6 million children's death in 2008(1). As it was learnt from many researches that effective health education programs are required to be designed in accordance with knowledge, attitude and practice (KAP) of society. This research also agreed and proved that effective health education programs are required to be designed in accordance with knowledge, attitude and practice (KAP) of society.

## 6.2 Practice of Mothers and Care takers on Children with Pneumonia

As this study proved the practice of mothers and caretakers on under five children with pneumonia at a satisfactory level were summarized as 75 (32.8%) and the not satisfactory level were summarized as 154(67.2%). This means that the demonstrated practical experience of mothers and caretakers on under five children with pneumonia is lower as many studies conducted in developing countries shown. The finding of this study is not enough to bring positive change and it needs further strengthen the clinical and HEWs service, providing health education.

As revealed in this study result section, 197(86%) mothers and care takers had a practice of antibiotic provision for sick children with pneumonia while 32(14%) of them had never been practiced with the provision of antibiotic to a child with pneumonia. The finding of this study is less than study conducted in urban Ethiopia (69.4%, 29%). Even though the study show high knowledge than practice it may be due to the reason that they may not practice even if they have adequate knowledge and their continuous knowledge is under question mark.

However, as opposed to other studies, this study has shown that 208(90.8%) of the respondents do practice giving syrup and 14(6.1%) tablet for their children with pneumonia. While 6(2.6%) of the respondents and 1(0.4%) gave other antibiotics and both syrup and tablets respectively to their children with pneumonia. This may be due to the reason that their awareness is increased by HEWs.

Regarding home treatment practice of mothers and care takers 10(4.4%) home treatment of children with pneumonia are with *tenaadam* provision. Nevertheless due to the relatively accessibility of health centers in the locality in the study area 97(42.4%) respondents do treat their children with pneumonia by providing modern drugs/medicines, 17(7.4%) holly water, 3(1.3%) massaging chest with herbs or butter, and 102(44.5%) consultation with health professionals respectively. This study is less than study conducted in urban Ethiopia (80%)

### **6.3 Attitude of Mothers and Care takers towards Children with Pneumonia**

As opposed to other studies, among this study respondents 19(8.3%) of mothers and care takers strongly agree that pneumonia as dangerous disease while 9(3.9%) of them agree that pneumonia as dangerous disease for children under five which is in line with other study conducted (10.6%) in Whereas, 52(22.7%), 144(62.5%) and 5(2.2%) respondents of this study perceived that they do not agree, strongly disagree and are indifferent to the severity of pneumonia to children under five respectively. This may be due to the less knowledge to practice it and it needs further strengthen the HEWs service in addition to health education.

Of the respondents 142(62%) of mothers and care takers strongly agree that a child with pneumonia should be brought before three days to health institution and 82(35.8% ) of them agree that a child with pneumonia should be brought before three days to health institution. While 3(1.3%), and 2(0.9%) respondents of this study perceived that they do not agree, and strongly disagree that a child with pneumonia should be brought before three days to health institution respectively. This may be due to increased awareness through Medias, HEWs and health education at health facility.

### **6.4. Knowledge of mother and care takers on children with pneumonia**

Regarding the knowledge of mothers and caretakers about the loss of appetite as a sign of pneumonia out of the 229 total mother and care taker respondents of this study, 124(54.1%) know about it, 68(29.7%) did not know about it, and 37(16.2%) were not sure yet about it. Concerning the knowledge of mothers and caretakers found out in this study, about the size of family members in children's room that can increase children's' chance to get pneumonia disease or other respiratory infection, were 199(86.9%) know about it, 22(9.6%) did not know about it, and 8(3.5%) were not sure yet about it. About the immunization that can prevent under five from getting pneumonia were expressed as 158(69.0%) know about, 51(22.3%) did not know about it, and 20(8.7%) were not sure yet about it. The finding of this study revealed that it needs further strengthen health education on immunization in addition to HEWs programme this is because of PCV vaccine is nationally introduced in the immunization guideline.

In general, this study revealed that, the knowledge level of mothers and caretakers on under five children with pneumonia at a not knowledgeable level were summarized as 128(55.9%) and the knowledgeable level were summarized as 101(44.1%). The result of this study showed that 44.1% of mothers/caregivers were knowledgeable which is in line with study conducted in Thailand (66%) and this is not enough to bring positive change for the further in the study area.

This study pointed out among the mothers and care takers in the study more than 70% them perceived that pneumonia as a dangerous disease and more than 80% mothers and care takers believed in a child with pneumonia should be brought to health institution as a early as possible. This is parallel when compared with the studies in Ethiopia, Gambia gutemala where four hundred and eighty three (89.4%) of the care givers perceived pneumonia as not dangerous and three hundred and thirty six (16.15%) prefer to take children to local healer (7).

This study agreed with previous studies done elsewhere where many mothers relatively had unfavorable practice similar with the current study. This study proved that mothers and care takers showed negative attitude with the same reason for low prevalence of unfavorable practice.

The findings of this study showed that age of mothers and care takers had a significant association with knowledge. This may be due to middle aged mothers and care takers have developed good knowledge through third life experience than young ones that is why most middle aged mothers and care takers replied a correct answer for questions in knowledge part of the questionnaire. Mothers and care takers marital status did show statically significant while most married ones had unfavorable knowledge.

This study revealed that there is highly statistical significant relationship between literacy status and knowledge of mothers and care takers. It was found out that those with a better educational level know the causes of pneumonia. While those illiterate did not reply correctly the cause of pneumonia.

It can be noted that occupation has highly statically significant association with knowledge of mothers and care takers. It was also shown that employed mothers and care takers had adequate knowledge when compared to others. This may be due to employed mothers and care takes had a communication access with many people including their colleague with different experiences.

## **7. LIMITATIONS OF AND STRENGTH OF THE STUDY**

### **7.1 Strength**

1. All respondents were interviewed.
2. Pretest was conducted to minimize errors during data collection
3. The questionnaires were developed from standardized tools from different research

### **7.2 Limitations**

1. This study did not triangulated by qualitative methods
2. The nature of cross-sectional study(Don't show which come

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## **8. CONCLUSIONS AND RECOMMENDATIONS**

### **8.1 CONCLUSION**

The central point of spotlight of this study was mothers' and care takers' knowledge, attitude and practice towards pneumonia of under five children. The majority of mothers don't practice it. In this study the socio-economic and demographic characteristics, knowledge, attitude and practice of mothers and care takers of the under five children with pneumonia were assessed. Hence the finding of this study is concluded in a way that mothers and care takers, practice, attitude and knowledge towards under five children with pneumonia were unsatisfactory. The study also showed that mothers and care takers practice, attitude and knowledge were affected by age, education, income and practice of mothers affected by occupation. This finding also indicated that there were some variables with unfavorable practice, negative attitude and in adequate knowledge which need more attention and effort by concerned bodies.

### **8.2 RECOMMENDATIONS**

Based on the findings of this study the following recommendations are forwarded to make situations more conducive for mothers and care takers on their knowledge, attitude and practice of under five children with pneumonia.

- Effective and strong health education through strengthening the existing health extension program must be provided to mothers and care takers with support of local educational materials to enable them recognize, causes of pneumonia, early detection of danger sign of pneumonia, urgent seeking of medical care and supportive cares of pneumonia cases.
- Capacity building, special KAP and awareness programs in regard to pneumonia under five children to be given in wide range not only of health personnel but it should include targeting mothers and care takers under five children, community health workers, community and religious leader including identification of cases and control of pneumonia.



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## ANNEX

### ANNEX-II Information sheet and consent form

This sheet is to be read for the participants of the study. My name is \_\_\_\_\_. I am working as data collector for **Damtew Bilata** a survey conducted by the collaboration of School of Nursing and Midwifery, Addis Ababa University to assess the knowledge, attitude and practice of mothers regarding pneumonia among under five children Lideta Sub city.

This will be critical input for policy makers and organizations involved on care and support for under five children activities. Your participation in this research is voluntary. If you decide not to participate, there will be no negative consequences for you. If you do decide to participate there will no incentives from this study but your input is important. However your participation on this study is very important for achievement of the study and for paving the way for the integration of under-five pneumonia health service in the early detection and giving appropriate care for children thereby increasing the quality of care for these people.

There is no any risk that will occur to you because of your participation in this study. All the responses given by you and results obtained will be kept confidential using coding system whereby no one will have access to your response. You are not expected to give your name or phone number. Without permission from you and legal body, any part of this study will not be disclosed to third person. You have full right to refuse and withdrawal to participate in this study if you don't wish any time.

The interview period will take about 15 minutes. If you are willing to participate in this study, you need to understand and sign the agreement form, and then you will be asked to give your responses by data collectors. **If you want to communicate you can get me through:**

**Name of Investigator:** .Damtew Bilata Tel: +251913122558

**Name of Advisors:** Asrat Demisse (Ass't prof.)

Are you voluntary to participate in the interview? Yes      N

**Informed consent form**

I hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participate voluntarily in the research project. I understand that I am at autonomy to withdraw from the project at any time.

Signature of participant \_\_\_\_\_ Date \_\_\_\_\_

Name and signature of Investigator \_\_\_\_\_ Date \_\_\_\_\_

Name and signature of data collector \_\_\_\_\_ Date \_\_\_\_\_

## **Annex II; English version Questionnaire**

### **Part I. Information sheet and consent form (English version)**

Dear respondent My name is \_\_\_\_\_ I am here to collect data for a study which entitled with “assessment of knowledge attitude and practice of mothers regarding pneumonia among under five children at Lideta sub city, Addis Ababa, Ethiopia, 2015.It is conducted by Damtew Bilata Who is a MSc in nursing student at Addis Ababa University, College of Medicine And Health Sciences, Department of Nursing & Midwifery. The purpose of this study is to assess knowledge, attitude and practice of mothers regarding pneumonia among under five children at Lideta sub The interview explores about your baby’s experience regarding pneumonia and will require about 20 to 25 minutes to be completed. As a study participant you will be benefited when the result is utilized. The study will be carried out in the form of interview and do not cause any harm to you. The result will be displayed in general form not in individual. To achieve the study, your honest and genuine participation by responding to the question prepared is very important and highly appreciated. You have also a right to continue or to discontinue as a participant and there is no any influence that insists you to participate unless you are volunteer.

#### **We will proceed to the interview after you understand the following points**

**Objective of the study:** to assess knowledge, attitude and practice of mothers regarding pneumonia among under five children at Lideta sub city.

**Benefit:** The information generated from the study help decision maker and health care Professional for designing appropriate nutritional education for the mothers and care givers on complementary feeding practice of infant and young child.

**Harm:** The participants do not have any harm by participating to the study

**Duration of the study and interview:** The study conducted for to weeks. The interview may take from20- 25 minutes.

**Alternatives to participation:** You do not have to take part in this research if you do not wish to do so. Your participation/ non-participation, or refusal to respond to the questions will have no effect now or in the future on services that you or any member of your family may receive from any service providers. In between, you have the right to terminate from the study by any reason, related to the study or personal reason.

**Confidentiality:** We would like to assure you that the privacy will strictly be maintained throughout. Your responses to any of the questions will not be given to anyone else and no reports of the study will ever identify you. If a report of the results will be published, only Information about the total group will appear.

**Persons to contact:** If you have any question you can contact the investigator at the following address and you may ask at any time you want.

Damtew Bilata

Tel: +251-913122558

E-mail: damtewb14@gmail.com

**Consent form:** I have read the document stated above or it has been read to me by the data collector as I can understand all conditions stated above. Therefore, I have decided to:

1. Agree \_\_\_\_\_

2. Disagree \_\_\_\_\_ on participation of the study

And I confirmed it by signature \_\_\_\_\_

Name of the interviewer: \_\_\_\_\_ Sign. \_\_\_\_\_ Date of interview \_\_\_\_\_

Name of the supervisor: \_\_\_\_\_ Sign. \_\_\_\_\_ Date \_\_\_\_\_

Thank You for willingness to participate

**Part III. Information sheet and consent form (Amharic version)**

**የምርምር/ጥናት/ ማብራሪያና የስምምነት መግለጫ ቅጽ**

**የምርምር ፕሮጀክቱ**

**1. መግቢያ**

እኔ-----እባላለሁ ዳምጠው ብላታ በተባለ ተመራማሪ ከአምስት ዓመት በታች የሆኑ ልጆች ስለሚከሰተው የሳንባ ምች በሽታ ያላቸውን እውቀት አኳሃንና ልምድ ለማወቅ በተዘጋጀ ጥናት ላይ መረጃ ሰብሳቢ ሠራተኛ ስሆን ይህንን ምጥናት ለማሳካት የእርስዎ ቅንነት የተሞላበት ተሳትፎ ወሳኝነት አለው። የዚህ የምርምር ማብራሪያና የስምምነት ቅጽ ዓላማ አሁን እርሶዎ እንዲሳተፉበት የምንጠይቀዎትን የምርምር ጥናት ምንነት ማብራራት ነው። በዚህ የምርምር ፕሮጀክት ለመሳተፍ ከመወሰንዎ በፊት ይህንን የማብራሪያ ቅጽ በጥንቃቄ በማንበብ ጥያቄዎች ካሉዎት ይጠይቁ። በተጨማሪም በጥናቱ መሳተፍ ከጀመሩ በኋላ በማንኛውም ጊዜ ጥያቄዎች ካሉዎት መጠየቅ ይችላሉ።

**2. የምርምር ፕሮጀክቱ ዓላማ**

ከአምስት ዓመት በታች የሆኑ ልጆች ስለሚከሰተው የሳንባ ምች በሽታ ያላቸውን እውቀት አኳሃንና ልምድ ለማወቅ የተዘጋጀ ነው።

**3. የአስራር ሂደት**

ይህንን ጥናት ዓላማ የተፈለገው ግብ እንዲመታና በጥናቱ መሠረት የተለያዩ ችግሮችን በመንግሥትና በሌሎች ድጋፍ ሰጪ ድርጅቶች አካላት ብብር አማካኝነት በጥናቱ የተደረሰባቸውን ችግሮች ለመፍታት እርስዎና ህፃንዎ እንዲሳተፉት ጋብዘዋል። በዚህ ጥናት ውስጥ ለመሳተፍ ከተስማሙ ስምምነቱን በደንብ መረዳትና እንዲሁም መፈረም ይገባዎታል። ከዚያ በመቀጠል በጥናቱ መረጃ ሰብሳቢዎች ለሚጠየቁት ጥያቄ እንዲመልሱ ፈቃደኝነትዎ ይጠየቃል። በዚህ ጥናት ሲሳተፉ የሚሠጡት መልስም ሆነ የሚገኘው ውጤት በምስጢር ይጠበቃል።

**4. ሊከሰቱ የሚችሉ ስጋቶችና ምቹት መጓደሎች**

በዚህ ጥናት መሰረት የመሳተፍ ምናልባት ጊዜዎን ሊሻማብዎ ይችላሉ ይሆናል። ነገርግን የጥናቱ ውጤት ወደፊት ከሚሠጠው ጥቅም አንጻር ይህን ያህል አይደለም። በዚህ ጥናት በመሳተፍ ምንም ዓይነት ስጋት(ችግር) አያጋጥምዎትም።

**5. ጥቅሞች**

በዚህ ጥናት በመሳተፍ የተለየ ጥቅም አያገኙም። ነገርግን የርሶዎ በጥናቱ መሳተፍ ለጥናቱ መሳካት በጥናቱ በተለይ ችግሮች መፍትሄ ሲሰጥ እረስዎ እና ሌሎች እናቶች ተጠቃሚ ይሆናሉ።

**6. ማካካሻ**

በዚህ ጥናት በመሳተፍ ምንም ዓይነት ማካካሻ አይሠጥዎትም። ነገር ግን በጥናቱ በመሳተፍ ምስጋናችን ከፍተኛ ነው።

**7. ምስጢር ስለመጠበቅ**

ከዚህ ጥናት የሚገኝ መረጃ በሙሉ በምስጢራዊነት ይጠበቃል። ለዚህ ጥናት የሚሠበሰበው እርሶዎን የሚመለከት መረጃ በማህደር የሚቀመጥ ሲሆን ማህደሩም በስመዎ ሳይሆን በተለየ ኮድ ሲቀመጥ ኮዱ ከዋናው ተመራማሪ ውጭ ለማንም አይገለጽም።

**8. በጥናቱ ያለመሳተፍ ወይም ራስን የማግለል መብት**

በጥናቱ ላለመሳተፍ ከፈለጉ በዚህ ጥናት ያለመሳተፍ ወይም ከአንድ በላይ ወይም ሁሉንም ጥያቄዎች አለመመለስ ይችላሉ። በዚህ ጥናት ባለመሳተፍ ወይም በከፊልም ሆነ በሙሉ ጥያቄዎችን ባለመመለስ ማንኛውንም አገልግሎት ከማግኘት አይከለክሉም።

**9. የሚገናኝቸው ሰዎች**

በጥናቱ ዙሪያ ማንኛውም ጥያቄዎች ከሚከተሉት ውስጥ ማንኛውንም ሰው በሚፈለጉት ጊዜ ማነጋገር ይችላሉ። ጸምጠዉ ብላታ - አዲስ አበባ ዩኒቨርሲቲ ሞባይል- 0913122558



**10. የስምምነት መግለጫ ቅጽ**

ከላይ በዝርዝር የተሰጡትን መረጃዎች እና ቅጹን አንብቤዋለሁ ወይም ልረዳ በምችለዋለሁ መልኩ በመረጃ ሰብሳቢው ተነቦልኛል። ስለሆነም በጥናቱ ላይ ስለመሳተፍ የሚከተለውን ወስኛለሁ

1. ተስማምቻለሁ \_\_\_\_\_

2. አልተስማማሁም \_\_\_\_\_

ይህንንም በፊርማ የአረጋግጣለሁ \_\_\_\_\_

የመረጃ ሰብሳቢው ስም \_\_\_\_\_ ፊርማ \_\_\_\_\_

መረጃው የተሰበሰበበት ቀን \_\_\_\_\_

የመረጃ ተቆጣጣሪ ስም \_\_\_\_\_ ፊርማ \_\_\_\_\_

## **Part IV. QUESTIONERS**

### **Part I;- Socio demographic characteristics of mothers related questions**

1. Age of mother in years \_\_\_\_\_
2. Religion
  - A. orthodox
  - B. Muslim
  - C. protestant
  - D. others
3. Ethnicity
  - A. Oromo
  - B. Amhara
  - C. Tigre
  - D. Gurage
  - E. Others
4. Marital status
  - A. married
  - B. single
  - C. divorced
  - D. widowed
5. Educational status
  - A. unable to read and write
  - B. 1-6
  - C. 7-12
  - D. >12
6. Occupation
  - A. house wife
  - B. daily Laborer
  - C. merchant
  - D. employed
7. Family income in birr (monthly)
  - A. < 100birr
  - B. 101-200 birr
  - C. 201-400 birr
  - D. > 400 birr

### **Part II; - practice related questions**

1. The amount of food and fluid given to a child with pneumonia would be?
  - A. Increased amount
    1. Yes
    2. No
  - B. Decreased amount
    1. Yes
    2. No
  - C. The same amount
    1. Yes
    2. No
  - D. Food and drink never be given
    1. Yes
    2. No

2. What Kind of treatment do you give to a child with pneumonia at home?
- A. Herbs (Tenadam, Damakesa, Dingetegna) 1. Yes 2. No
- B. Modern drug (syrup, Antibiotics) 1. Yes 2. No
- C. Holy water 1. Yes 2. No
- D. Massaging chest with butter or herbs. 1. Yes 2. No
- E. No, it is undesirable practice I should consult health personnel 1. Yes 2. No

3. Do you give antibiotic to your child with pneumonia?

- A. Yes B. No

4. What kind of antibiotic do you give to a sick child with pneumonia?

- A. Syrup 1. Yes 2. No
- B. tablets 1. Yes 2. No
- C. Others 1. Yes 2. No

5. Where did you go to get treatment when your child becomes sick with pneumonia?

- A. Self-medication 1. Yes 2. No
- B. Health institution 1. Yes 2. No
- C. Traditional healers 1. Yes 2. No
- D. Do nothing 1. Yes 2. No

**Part III; - Attitude related questions**

1. Pneumonia is not a dangerous disease, which does not harm a child with pneumonia if left untreated

- A. strongly agree B. Agree C. Indifferent D. Disagree E. strongly disagree

2. A child with pneumonia should be brought immediately to health institution

- A. Strongly disagree B. Agree C. Indifferent D. Disagree E. strongly disagree

3. A child with pneumonia should be isolated to protect from "Tilla" which causes pneumonia.

- A. Strongly agree B. Agree C. Indifferent D. Disagree E. strongly disagree

4. Traditional healers sometimes can treat childhood pneumonia

A. Strongly agree B. Agree C. Indifferent D. Disagree E. strongly disagree.

5. Mothers can treat cough or common cold at home

A. Strongly agree B. Agree C. Indifferent D. Disagree E. strongly disagree

**6. Antibiotic gave usually useful to treat a child with pneumonia,**

A. Strongly agree B. Agree C. Indifferent D. Disagree E. strongly disagree

**PartIV; - Knowledge related questions**

1. What causes pneumonia?

A. Evil eye 1.Yes 2. No

B. Micro- organisms 1.Yes 2. No

C. Exposure to cold 1.Yes 2. No

D. From God 1.Yes 2. No

2. Which of these signs are danger sign of pneumonia a child should be brought to health institution urgently?

A. Vomiting everything 1.Yes 2. No

B. Convulsing 1.Yes 2. No

C. Unable to feed 1.Yes 2. No

D. Fever 1.Yes 2. No

E. All 1.Yes 2. No

3. To sponge the sick child who has high fever with fresh water is good and easy way to reduce the temperature

A. I know B. I do not know C. I am not sure

4. Loss of appetite is sign of serious disease

A. I know B. I do not know C. I am not sure

5. Children with pneumonia sometimes have chest pain

A. I know      B. I do not know      C. I am not sure

6. Exclusive breast feeding will increase the immune system and decrease chance of body from getting pneumonia

A. I know      B. I do not know      C. I am not sure

7. Many family members in children's room doesn't increase children chance to get pneumonia disease or other respiratory infection

A. I know      B. I do not know      C. I am not sure

8. Immunization can prevent your child from getting pneumonia.

A. I know      B. I do not know      C. I am not sure

9. The sign of pneumonia is?

A. cough                      1. Yes    2. No

B. Fast breathing    1. Yes    2. No

C. Difficulty of breathing    1. Yes    2. No

D. Fever                      1. Yes    2. No

Name of data collector -----

Signature.....

Annex IV- Amharic version of questioner

መጠይቅ:

እናቶችዎ ይህንን ስርዓት ያከናወኑት በግብይት ለማግኘት ከገቢዎቹ ውጭ በሌሎች ጉዳዮች ላይ በሌሎች ጉዳዮች ላይ ሌላውን እውቀት አካሄድን የምናውቀው (ለማግኘት) የተዘጋጀ መጠይቅ፡-

ማስታወሻ፡-

- የተሰጠውን ምላሽ ያክብቡ
- ስሞዎን ያስጠይቁ ለደንበኞች እንዲገባ

ሀ. የማህበራዊ አኗኗር መረጃ

ቀን:-----

የጤና ተቋም ስም:-----

1. የወላጅ /አሳዳጊ /እድሜ በአመት-----
2. ሐይማኖት ሀ) ኦርቶዶክስ ለ) ሙስሊም ሐ) ፕሮቴስታንት መ) ሌላ
3. ብሄር ሀ) ኦሮሞ ለ) አማራ ሐ) ትግሬ መ) ጉራጌ ሰ) ሌላ
4. የጋብቻ ሁኔታ ሀ) ያገባችላል ያልገባችላል) የፈታች መ) ባለቤቷ የምትገኝ
5. የትምህርት ሁኔታ ሀ) ያልተማረችላል) 1 እስከ 6 ሐ) ከ7 እስከ 12 መ) ከ12 በላይ
6. ወረሃዊ የሴተኛ ብንጋራ መጠን ሀ) ከ100 ብር ያነሰ ለ) ከ101 እስከ 200 ብር ሐ) ከ201 እስከ 400 ብር መ) ከ400 ብር በላይ

**ሰ. ልማድ/ተግባር / :-**

1. በሳንባም የታመመውን ህጻን የትኑው የምትወስድዎት?  
  - ሀ) እራሴ መድሃኒት እስጠዋለሁ 1.አዎ 2. አይደለም
  - ለ) ጤና ተቋም እውቅና ስጠዋለሁ 1.አዎ 2. አይደለም
  - ሐ) የባህላዊ መዳሃኒት ጋር እውቅና ስጠዋለሁ 1.አዎ 2. አይደለም
  - መ) ምንም አላደርግልትም 1.አዎ 2. አይደለም

2. በሳንባምችለታመመውህባንምንአይነትመድሃትነውየምትሰጧው?
  - ሀ) ጤናአዳም፣ ዳማክስይ፣ ድንገተኛ 1.አዎ 2. አይደለም
  - ለ) ዘመናዊመድሃት/ፀረ -ተህዋሲያን/ 1.አዎ 2. አይደለም
  - ሐ) ፀበል 1.አዎ 2. አይደለም
    - መ) ደረቱንበቅቤአሽለታለሁ 1.አዎ 2. አይደለም
    - ሠ) ምንምአልሰጠውምየጤናባለሙያንአማክራለሁ 1.አዎ 2. አይደለም
3. የሳንባምችለታመመህባንመሰጠትያለበትየምግብናየፈሳሽመጠንመሆንያለበት?
  - ሀ) በመጠኑከፍያለመሆንአለበት 1.አዎ 2. አይደለም
  - ለ) እንደወትሮውመሆንአለበት 1.አዎ 2. አይደለም
  - ሐ) መጠኑዝቅያለመሆንአለበት 1.አዎ 2. አይደለም
    - መ) ምግብናመጠጥበፍፁምመሰጠትየለበትም 1.አዎ 2. አይደለም
4. በሳንባምችለታመመልጅጸረ- ተዋስያንትሰጫለሽ?
  - ሀ) አዎ ለ) አልሰጥም
5. ለሳንባምችለታመመልጅምንአይነትፀረ- ተዋስያንትሰጫለሽ?
  - ሀ) ሽሮፕ1.አዎ 2. አይደለም
  - ለ) ክኒን1.አዎ 2. አይደለም
  - ሐ) ሌላ 1.አዎ 2. አይደለም

ሐ.አካላትንወይምአመለካከት:-

1. የሳንባምችአስጊበሽታስላልሆነበሳንባምችየታመመህባንናክመውምህጸኑላይጉዳትአይደርስበትም
  - ሀ) አጥብቁእስማማለሁ ለ) አስማማለሁ ሐ)እቃወማለሁ
  - መ) አጥብቁእቃወማለሁ ሠ) ግድየለኝም
2. በሳንባምችለታመመልጅወዲያውኑወደጤናተቋምመወሰድአለበት
  - ሀ) አጥብቁእስማማለሁ ለ) አስማማለሁ ሐ)እቃወማለሁ
  - መ) አጥብቁእቃወማለሁ ሠ) ግድየለኝም
3. በሳንባ ምች የታመመ ህባን«ጥላን» ለመከላከልመገለልአለበት
  - ሀ) አጥብቁእስማማለሁ ለ) አስማማለሁ ሐ)እቃወማለሁ
  - መ) አጥብቁእቃወማለሁ ሠ) ግድየለኝም

4. የባህል መድሃኒተኛ አንዳንድ ጊዜ የሳንባ ምችን ሊያድን ይችላል

- ሀ) አጥብቄ እስማማለሁ                      ለ) አስማማለሁ                      ሐ) እቃወማለሁ
- መ) አጥብቄ እቃወማለሁ                      ሠ) ግድየለኝም

5. ዘመናዊ መድሃኒት (ጸረ-ተህዋስያን) በሳንባ ምች ለታመመ ህፃን ዘወትር መስጠት አስፈላጊ ነው

- ሀ) አጥብቄእስማማለሁ                      ለ) አስማማለሁ                      ሐ)እቃወማለሁ
- መ) አጥብቄእቃወማለሁ                      ሠ) ግድየለኝም

6. እናቶች ሳልን ጉንፋንን እቤት ውስጥ ማከም ይችላሉ

- ሀ) አጥብቄእስማማለሁ                      ለ) አስማማለሁ                      ሐ)እቃወማለሁ

መ) አጥብቄ እቃወማለሁ                      ሠ) ግድ የለኝም

**መ.እውቀት (ግንዛቤ):-**

1. የሳንባምችመነሻውምንይመስልሻል?

ሀ) የሰውአይን(ቡዳ)    1.አዎ    2. አይደለም

ለ) ተህዋስያን    1.አዎ    2. አይደለም

ሐ) ብርድ    1.አዎ    2. አይደለም

መ) የእግዚአብሔርቁጣ    1.አዎ    2. አይደለም

2. የሳንባምችምልክቶችምንምንናቸው?

ሀ) ሳል1.አዎ    2. አይደለም

ለ) ተሎተሎመተንፈስ1.አዎ    2. አይደለም

ሐ) ያተነፋፈስችግር1.አዎ    2. አይደለም

መ) ትኩሳት    1.አዎ    2. አይደለም



3. ከሚከተሉ አደገኛ ምልክቶች በሳንባ ምች የታመሙን ህፃን በአስቸኳይ ወደ ጤና ተቋም ሊያስወስድ የሚችለው የትኛው ነው?

ሀ) የበላውንም ሆነ የጠጣውን የሚያስመልሰው ከሆነ 1.አዎ 2. አይደለም

ለ) ካንቀጠቀተው 1.አዎ 2. አይደለም

ሐ) ምግብምሆነአልወስድካለ 1.አዎ 2. አይደለም

4. ትኩሳት ያለበትን ህፃን ትኩሳቱን ለመቀነስ በቀዝቃዛ ውሃ ሰውነቱን መንከር ቀላልና ጥሩ መሆኑን ታውቂያለሽ?

ሀ) አዎ አውቃለሁ ለ) አላውቅም ሐ) እርግጠኛ አይደለሁም

5. የምግብ ፍላጎት መቀነስ የከባድ በሽታ ምልክት ነው?

ሀ) አዎአውቃለሁ ለ) አላውቅም ሐ) እርግጠኛ አይደለሁም

6. በሳንባ ምች የታመሙ ህፃናት አንዳንድ ጊዜ የደረት ህመም አላቸው?

ሀ) አዎአውቃለሁ ለ) አላውቅም ሐ) እርግጠኛ አይደለሁም

7. ለህፃናት እስከ 6 ወር የእናት ጡት ወተት ብቻ መስጠት የሰውነታቸውን የበሽታ የመከላከል አቅም ይጨምራል፤ እንዲሁም በሳንባ ምች የመያዝ እድላቸው ይቀንሳል?

ሀ) አዎአውቃለሁ ለ) አላውቅም ሐ) እርግጠኛ አይደለሁም

8. በህፃኑ ማደሪያ ክፍል ውስጥ ብዙ የቤተሰብ አባላት መኖር ህፃኑ በሳንባ ምች ወይንም በመተንፈሻ አካል ህመም የመያዝ እድል ይጨምራል?

ሀ) አዎአውቃለሁ ለ) አላውቅም ሐ) እርግጠኛ አይደለሁም

9. ክትባት ልጆች በሳንባ ምች እንዳይያዙ ይከላከላል?

ሀ) አዎአውቃለሁ ለ) አላውቅም ሐ) እርግጠኛ አይደለሁም

የመረጃ ሰብሳቢው ባለሙያ ስም:-----

ፊርማ:-----

# DECLARATION

I the undersigned, declare that this MSc. thesis is my original work, has never been presented in this or any other university, and that all resources and materials used for the thesis have been fully acknowledged.

Name: Damtew Bilata

Signature \_\_\_\_\_

Place Addis Ababa, Ethiopia

Date of submission \_\_\_\_\_

This thesis has been submitted for examination with my approval as university advisor.

Advisor Name: Assitant Professor Asrat Demssie

Signature \_\_\_\_\_

Date \_\_\_\_\_