MOTHERS' KNOWLEDGE AND PRACTICE ABOUT NEONATAL DANGER SIGNS AND ASSOCIATED FACTORS IN WOLKITE TOWN, GURAGE ZONE, SNNPR, ETHIOPIA.

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A RESEARCH THESIS SUBMITTED TO JIMMA UNIVERSITY INSTITUTE OF HEALTH, FACULTY OF HEALTH SCIENCE, SCHOOL OF NURSING AND MIDWIFERY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR MASTER DEGREE IN MATERNITY NURSING.

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JIMMA, ETHIOPIA.

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Abstract

Background: *Neonates are more prone to show subtle signs of illness. Most infants are either born at home or are discharged from the health facility early, families should be able to recognize signs of newborn illnesses and bring the newborn infant to the attention of a health worker. For too many babies, their day of birth is also their day of death. In the world almost 1 million neonatal deaths occur on the day of birth, and close to 2 million die in the first week of life. In order to decrease this mortality, it is crucial to ensure that every newborn has access to and receives care and life-saving interventions.*

Objective: *To assess mothers' knowledge and practice about neonatal danger sign and associated factors in wolkite town, gurage zone, South nation nationality peoples region, Ethiopia, 2017.*

Methods: *Community based cross sectional study design was carried out in wolkite town from March to April, 2017. A total of 368 mothers who gave birth within 12 months prior to the study period were selected by using systematic random sampling technique. Pretested Structured questionnaire was used to collect data. Data was entered into Epi data version 3.1 and exported into statistical package for social science version 21 for analysis. Bivariate and multivariable logistic regression model was used for identifying statistically significant associations between dependent and independent variables.*

Result: *In this study, 31.32% of mothers have good knowledge about neonatal danger sign. From a total of mothers, 64.5% respondents' practice for their sick neonate was unsafe. Mothers secondary and above educational level (AOR= 1.21, CI 0.049, 0.677), income (AOR= 0.44, CI 0.201, 0.964), place of birth (AOR= 1.867, CI 1.102, 3.164) and source of information (AOR= 0.173, CI 0.034, 0.875) were factors for having good knowledge. Husbands' educational level (AOR= 0.183, CI 0.049, 0.677), husbands' occupation (AOR= 0.132, CI 0.032, 0.543), place of delivery (AOR=6.45, CI 2.617, 7.185) and PNC follow up (AOR= 6.19, CI 1.070, 5.626) were factors that contribute for mothers to bring their sick neonate to health institution.*

Conclusion and recommendation: *There was poor knowledge of mothers towards neonatal danger signs and unsafe practice. Town health office, NGOs and health workers should collaborate to create awareness about neonatal danger sign in the community.*

Keywords: *Neonate; Neonatal Danger Sign; Knowledge; Practice.*

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Acronyms

ANC - Ante Natal Care

AOR- Adjusted Odd Ratio

CI - Confidence Interval

EDHS - Ethiopian Demographic Health Survey

IMNCI - Integrated Management of Newborn and Childhood Illness

IMR - Infant Mortality Rate

IRB - Institutional Review Board

Km - Kilo Meter

MDG - Millennium Development Goal

NMR - Neonatal Mortality Rate

OR - Odd Ratio

PNC - Post Natal Care

SDG - Sustainable Development Goal

SNNPR - South Nation Nationality Peoples Region

SPSS - Statistical Package for Social Science

UNICEF- United Nations Children Education Fund

WHO - World Health Organization

CHAPTER ONE: INTRODUCTION

1.1 Back ground

A newborn or neonate is a child under 28 days of age. During these first 28 days of life, the child is at highest risk of dying. It is thus crucial that appropriate feeding and care are provided during this period, both to improve the child's chances of survival and to lay the foundations for a healthy life (1).

Neonatal danger signs refer to presence of clinical signs that would indicate high risk of neonatal morbidity and mortality and need for early therapeutic intervention. Fever is an elevation of body temperature above the normal daily variation. It is one of the famous manifestations of diseases and it is the most common cause to seek health care provider and visit physicians in childhood. Convulsion, which is one of neonatal danger sign happen because of sudden, abnormal electrical activity in the brain. Lethargy and poor sucking, especially in an infant who was feeding well earlier, are very important and sensitive indicators of neonatal illness. An increased respiratory rate (more than 60 per minute when counted for at least one minute) and chest retractions indicate a serious problem. Vomiting and Jaundice are also important danger signs which require urgent treatment (2).

Children are an embodiment of our dreams and hopes for the future. For a nation to grow and progress, the well-being and the health of the children are crucial importance (3). Newborns are "at risk" for developing illness, health problems and injuries than adults, so continuous observation and constant care from family member is necessary for the survival of newborn. Danger signs in the neonatal period are nonspecific and can be a manifestation of almost any newborn disease. Neonates are more prone to show subtle signs of illness. Since most infants are either born at home or discharged from the health facility early, families should be able to recognize signs of newborn illnesses and bring the newborn infant to the attention of a health worker (4).

Different tools to facilitate identification of these health problems and to reduce neonatal mortality have been introduced into health programs in several countries. Integrated Management of Newborn and Childhood Illness (IMNCI) developed by the World Health

Organization (WHO) focuses on assessment of general danger signs in the examination of children presenting with illness at health care centers. The danger signs of severe illness included:- 1) history of difficulty feeding, 2) movement only when stimulated, 3) temperature below $35.5^{0}C$, 4) temperature above $37.5^{o}C$, 5) respiratory rate over 60 breaths per minute, 6) severe chest in drawings and, 7) history of convulsions. Assessment of these signs will result in a high overall sensitivity and specificity for predicting the need for hospitalization of a newborn in the first week of life (5).

Despite current increased efforts, much more needs to be accomplished to reduce neonatal mortality rates. One way of reducing neonatal mortality is upgrading mothers and care givers knowledge about child and neonatal health. If mothers and care givers have knowledge about health, they will seek medical care early, so children can be saved from preventable death. In Ethiopia very few researches are done to assess mothers' knowledge about neonatal danger signs but the findings shows that mothers have poor knowledge.

1.2 Statement of the Problem

The neonatal period is the most critical time for the survival of an infant. For too many babies, their day of birth is also their day of death (6). Every year an estimated 4 million babies die in the first 4 weeks of life and, Almost all (99%) deaths arise in low-income and middle-income countries. The highest numbers are in south-central Asian countries and the highest rates are generally in sub-Saharan Africa (7). In these regions, especially the sub- Saharan, preventable health conditions with access to affordable and simple interventions account for more than half of child deaths (8).

Despite the widely known intervention that could save the life of women, newborns and children; each year millions of women, newborns and children die from preventable causes. Almost half of these deaths occur in Sub-Saharan Africa (9).

In the sub-Saharan Africa, in addition to the factors mentioned so far low accessibility due to distance to the referral health facility, preference of traditional healer for illness associated with spirits, and lack of knowledge to identify signs and symptoms of the illness related to the neonates takes the leading role (10).

Childhood mortality levels are decreasing in Ethiopia. According to Ethiopian Demographic Health Survey 2016 Neonatal Mortality Rate are 29 per 1,000 live births. Infant mortality Rate (IMR) is 48 deaths per 1,000 live births and Under-five mortality was 67 deaths per 1,000 live birth (11). Most neonatal death take place at home, this indicating that lack early recognition on the danger sign and low treatment seeking practice of mothers (care taker) towards modern health care service (12).

In Ethiopia, although significant works has been done in the implementation of IMNCI, children are still suffering from morbidities and mortalities related with danger signs. This is mainly attributed to parent's care seeking practices. Only few studies were conducted in Ethiopia with regard to care seeking practice of mothers for their children (13).

The newborn cannot explain or express their discomfort and therefore identification and diagnosis of illness may be delayed if parents are not intelligent, observant, and concerned.

Mothers are the primary caregivers of the newborn. Thus the knowledge of the mothers regarding newborn danger signs has a great influence on the health of the newborn (14).

Effective and early management at home level and prompt health care seeking practice for the newborn danger signs serve as a backbone in reduction of newborn mortality. Integrated management of neonatal and childhood illness emphasizes that mothers, community leaders and health workers should be able to identify the danger signs among newborn for appropriate care seeking (15).

This distressing figure of neonatal mortality occurs because a newborn can die within minutes if prompt recognition, diagnosis and treatment are not initiated. Reduction of neonatal and infant mortality to acceptable level is impossible without good maternal knowledge regarding neonatal danger signs. This is because of the fact that, these danger signs are the entry point to provide comprehensive neonatal health care. Because most babies are born at home or are discharged from the hospital in the first 24 hours, increasing community awareness of the danger signs of newborn and improving mothers' practice is important for improving newborn survival.

In Ethiopia very few researches were done to assess mothers' knowledge about neonatal danger signs but the findings shows that mothers have poor knowledge but there is no research that show mothers practice. So this research aimed to assess the mothers' knowledge and practice about neonatal danger sign and what factors influence mothers to have poor knowledge and not seeking modern medical care for their sick neonates.

1.3 Significance of the study

The greatest gap in newborn care is often during the critical first week of life when most neonatal deaths often occur at home and without any contact with the formal health sector. These conditions can be managed if mothers are aware of newborn danger signs and develop experience of early recognition and health care seeking practice for newborn illness.

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

The results of the study will also add the evidence about mother's recognition of newborn danger signs and it will help health professionals to identify the gap. Policy makers also can use it to generate a new policy on it.

CHAPTER TWO: LITERATURE REVIEW

2.1 Knowledge of mothers about neonatal danger signs

In India, Dongrel et al conducted a study to assess mother's knowledge and explore their perceptions about newborn danger signs and health care seeking behavior. They conducted a cross-sectional survey in 3 of the 27 primary health centers of wardha district. About 67.2% of mothers knew at least one danger sign. Majority of mothers (87.4%) responded that the sick newborn should be immediately taken to the doctor, but only 41.8% of such sick newborns got treatment (16).

The study conducted in Nepal showed that mothers' knowledge of newborn danger signs was poor. The finding also showed that women were more knowledgeable than men. Most people use home remedies to treat newborns with danger signs, or they call faith healers. Only after these remedies have failed to alleviate the problem, they seek care from health facilities (17).

The study done in Enugu state, South-East Nigeria, to assess mothers' knowledge of danger signs in neonates showed that 78.7% mothers had good knowledge (18) also the study done in Southwestern Rural Uganda 14.8% of mothers were knowledgeable (8).

The study conducted in the four regions of Ethiopia showed that 29.3% of mothers had good knowledge about neonatal danger sign (19). The study conducted in North West of Ethiopia show that 110 (18.2%) of mothers had good knowledge about neonatal danger sign. Two hundred-forty (39.8%) mothers' responded high temperature, 205 (34%) vomiting, 163 (27%) diarrhea, and 104 (17.2%) unable to feed as a key neonatal danger sign (20).

The study conducted in Gedeo zone SNNRP, Ethiopia showed that from all study participant only 32.4% of the study participant had knowledge of at least one of any of the newborn danger signs. Danger signs mentioned by respondents were:- 19.3%, 76.6%, 48.1% said Convulsion, fever, no breast feeding respectively (21).

2.2 Mothers practice for danger sign

The study conducted to assess mothers practice in Uttar Pradesh, northern India, showed that 23% of respondents sought health care or administered medicines for neonatal illness. The preferred health-care provider was either a local medical doctor (registered or non-registered) (60.7%), followed by a traditional healer (19.6%) while the remainder were treated with home remedies. Modern medicines were administered to 78.3% (36/46), while the rest used indigenous medicine and traditional homemade medicines, either alone or in combination with modern medicine (22).

The study finding in Nepal showed that most people use home remedies to treat newborns with danger signs, or they call faith healers. Only after these remedies have failed to alleviate the problem, they seek care from health facilities (17).

In sub-Saharan Africa, a study conducted in Ghana, reveals that only 29.1% of neonates with danger signs received postnatal care in the first two days, and 52.4% at two weeks of life indicating delays in seeking care (23). In Nigeria, the behavior is somehow appreciable in which, approximately half (47.7%) of the 263 Nigerian mothers, took the child to the hospital immediately without any home intervention. One hundred thirty three (50.5%) took other remedies instead of seeking care from health facilities (24).

Traditional practices preclude caregivers and parents from taking neonates outside the home even if they are ill. In a study on care-seeking and adherence to treatment for neonatal illnesses conducted in a periurban cohort in New Delhi, India, 40% of caregivers did not seek outside care (25).

Traditional healing systems and biomedical treatment are used as complementary services in most societies in the world. The decision to go to traditional healers is affected by many factors, such as, traditional beliefs (for example, the influence of evil spirits), lack of understanding of the problem (17). Traditional practices cannot be neglected in considering the achievement of better neonatal care in developing countries. Cultural beliefs and practices often lead to self-care, home remedies and consultation with traditional healers in rural communities(26).

2.3 Factors associated with maternal knowledge about neonatal danger signs

2.3.1 Socio-demographic factors

The study done in Kenya to assess knowledge about neonatal danger sign among mothers attending well baby clinic showed that Age of the mother, level of education, mothers receiving information on neonatal danger signs from care provider are increased having knowledge of neonatal danger sign (27).

The study conducted in North West Ethiopia show that economy, maternal obstetric factors, mother educational status, husband educational status, and mothers' access for television service were the factors that significantly affect maternal knowledge. Mothers secondary education and above college level are three times knowledgeable about neonatal danger signs as compared to mothers at primary education level. Similarly, husbands secondary education and above college level were nearly four times to mention at least three neonatal danger signs as compared to husbands with primary education. Likewise, those mothers' who have access to television increased their knowledge about neonatal danger signs by 3.5 times (20).

2.3.2 Obstetrical factors

The study done in North West Ethiopia show that Mothers who attended ANC are two times more likely to had knowledge than those did not attend ANC. Similarly, mothers who had PNC follow up are two times more likely to have good knowledge compared to those who did not follow (20).

2.4 Factors associated with maternal practice about neonatal danger signs

Study conducted in Southern Tanzania on understanding home-based neonatal care practice reported that majority of mothers reported that they knew what action to take when the baby became sick, but accessibility, and lack of money were mentioned as barriers to neonatal care-seeking (28).

Education of mother and father and their work status have strong effect on child survival in developing countries. Educated women tend to provide better healthcare, hygiene and are more likely to seek help when a child is ill (29).

Conceptual Framework
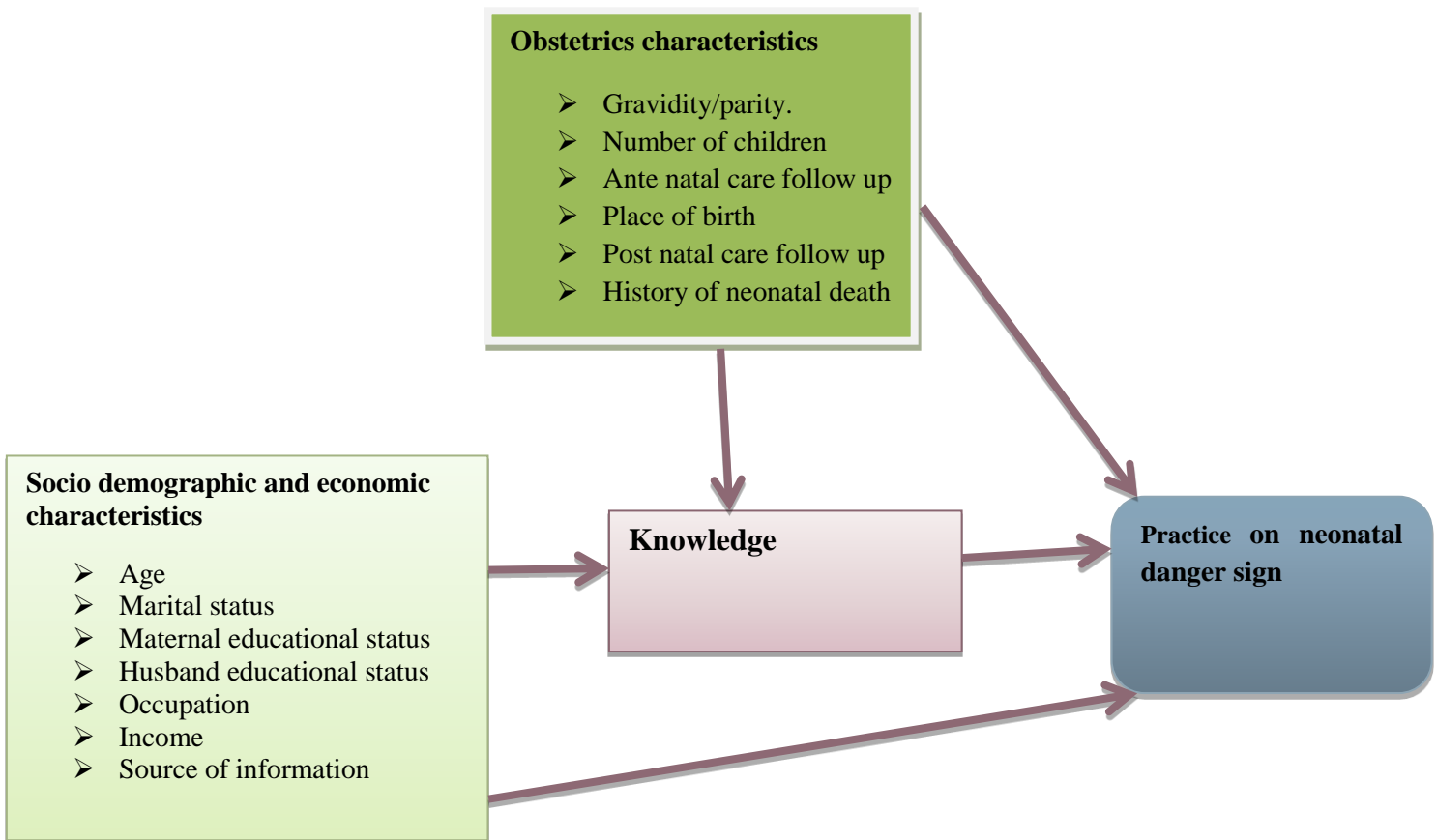
Fig. 1: Conceptual framework developed after reviewing many literatures.

CHAPTER THREE: OBJECTIVES

3.1 General objective

To assess mothers' knowledge and practice about neonatal danger sign and associated factors in wolkite town, gurage zone, SNNPR, Ethiopia, 2017.

3.2 Specific objectives

1. To determine knowledge level of mothers' on neonatal danger sign.
2. To assess practice of mothers` towards neonatal danger sign.
3. To identify factors affecting mothers knowledge of neonatal danger sign.
4. To identify factors affecting practice of mothers' for neonatal danger sign.

CHAPTER FOUR: METHODS AND MATERIALS

4.1 Study area and period

Wolkite, which is 158km far from Addis Ababa, is a town and administrative center of the Gurage Zone of the Southern Nations, Nationalities and Peoples' Region (SNNPR). Its astronomical location is 07010' 08'' North Latitude and 370 37'50'' East Longitude and an elevation between 1910 and 1935 meters above sea level. It is surrounded by Kebena woreda and it was part of former Goro woreda. It has 6 kebeles, electrical power, telephone and postal service, collage, university and also bank and other financial institutions, as well as one health center.

Based on the 2007 Census conducted by the Central Statistical Agency, this town has a total population of 28,866, of whom 15,074 are men and 13,792 women. There are 2532 under one year children in the town.

The study was conducted from March 7 to April 30, 2017.

4.2 Study design

Community based cross sectional study design was carried out

4.3 Population

4.3.1 Source population

All households with mothers who giving birth within 12 months and lived in the town six months and above.

4.3.2 Study population

All sampled mothers who give birth within 12 months.

4.3.3 Inclusion criteria

All mothers who give birth within 12 months.

4.3.4 Exclusion criteria

Those mothers who are seriously ill during data collection time and unable to respond.

4.4 Sample size and sampling procedures

4.4.1 Sample size

Sample size was determined by using single population proportion formula based on the following assumptions.

$$n = \frac{z\left(\frac{\alpha}{2}\right)2 * P(1-p)}{d^2}$$

Where;

   n= the desirable calculated sample size

   Z ($\propto$/2) =1.96 (95% confidence level for two side)

   P = prevalence of practice for neonatal danger sign 50%, since no similar study conducted in the study area is not available

   d = margin of error to be tolerated (5%)

   Therefore the value of **n** will be calculated as

$$n = \frac{(1.96)^2 * 0.5(1-0.5)}{(0.05)^2} = 384$$

Since the population of mothers in the town are less than ten thousand the finite correction formula was used.

$$n_f = \frac{n}{1+n/N}$$

n_f = 384/1+384/2532 = 333.4 ≈ 334

Considering 10% non-response rate, the final sample size become, **334 +34 = 368**

4.4.2 Sampling procedures

The town has 6 Kebeles; all Kebeles was included in the study. There are 2532 mothers who were eligible. The study participants in each Kebeles were proportionally allocated. Every house in each kebele which have those mothers gave birth within 12 months were coded then by using systematic random sampling technique every 7th mothers were interviewed.
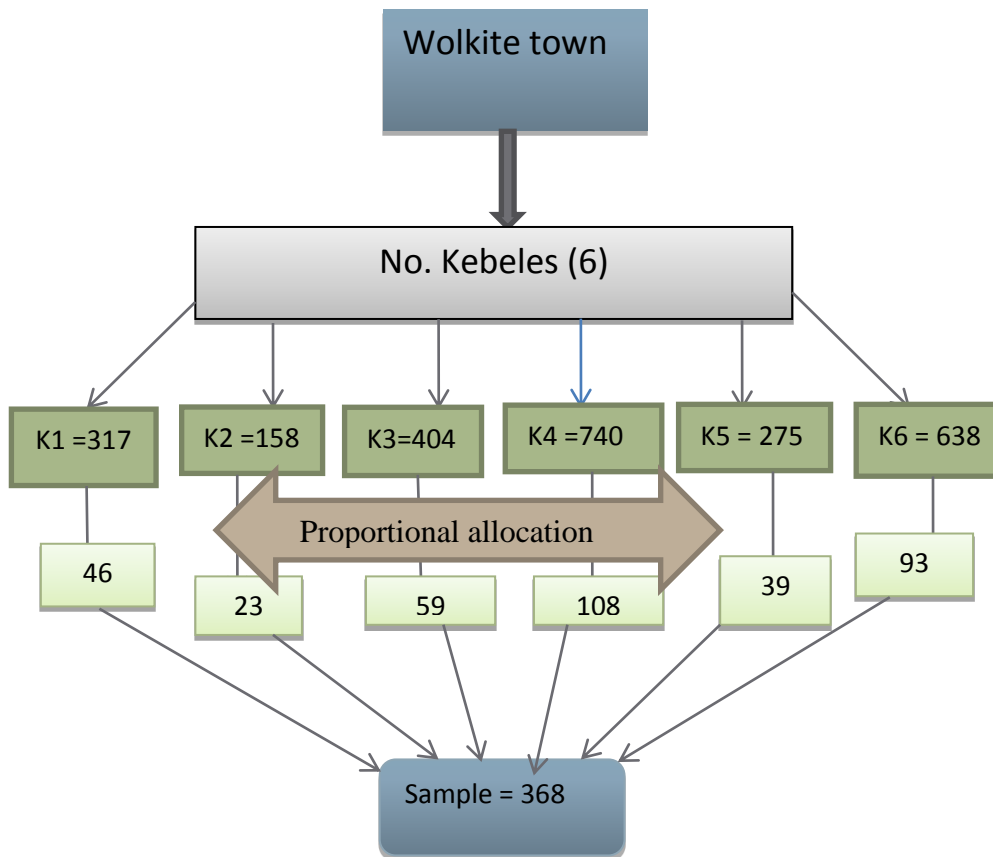
Fig.2: Schematic presentation of sampling procedure.

4.5 Study Variables

4.5.1 Dependent variables'

  ➢ practice on neonatal danger signs
  ➢ knowledge on neonatal danger signs

4.5.2 Independent variables

- Socio demographic and Socio economic characteristics (age, marital status, ethnicity, religion, maternal and husband's educational status, occupation, average monthly income, Source of information)
- Obstetric characteristics (number of pregnancy, number of children alive and died, ANC & PNC follow up, place of birth).
- Awareness of general danger sign.

4.6 Operational and definition of terms

Neonate: - refers to, 'period from birth to 28 days of life.

Neonatal danger sign: – refers to, 'presence of clinical signs that would indicate high risk of neonatal morbidity and mortality and the need for early therapeutic intervention. This includes poor sucking, lethargy or drowsiness, rapid or difficulty of breathing, hypothermia and hyperthermia, yellow color of palms and soles, diarrhea loose or bloody stools, convulsions and vomiting.

Good Knowledge: – those mothers listing three and above neonatal danger signs.
Poor knowledge: - those mothers list less than three of neonatal danger signs. (20)

Practice: - actions taken by mothers when danger sign occur.

Safe: - those mothers take their sick neonate to health institution.

Safe practice: - mothers who score mean and above mean for positive questions.

Unsafe practice: - those mothers who score below mean for positive questions.

4.7 Data collection instrument

The questionnaire was developed from reviewing of different related literatures. The questionnaire was prepared in English then translated into Amharic and then back to English in order to ensure its consistency by language experts. It consisted of information on socio-demographic characteristics, Obstetric characteristics, knowledge, and practice questions. The internal reliability of the item was checked by computing Cronbach's alpha (socio-demographic

characteristics 0.87, Obstetric characteristics 0.75, knowledge 0.73, and practice 0.7) was for the tool.

4.8 Data collection procedure

Data was collected by using pre -tested structured interviewer administered questionnaire by face to face interviewing the mother. Mothers absent during data collection time the next mother was interviewed. Two bachelor degree midwives for supervision and three diploma holder teachers for data collection were recruited.

4.9 Data processing and analysis

The gathered data was coded, cleaned, recoded and entered into Epi-data version 3.1 and finally export to SPSS version 21 for analysis. Simple descriptive summary statistics was done. Tables, statements, charts and graphs were used to present the result of the analyzed data. Associations between independent and dependent variables were analyzed first using bivariate logistic regression analysis. Variables that had $p<0.25$ on bivariate analysis were entered into multivariable logistic regression analysis. The statistical association between the different independent variables in relation to dependent was measured using OR, AOR, 95% CI and P-values <0.05 was considered statistically significance.

4.10 Data quality management

The English version of questionnaire was translated into Amharic language then it was translate back to English in order to ensure its consistency. The data collectors and supervisors were trained for one day before pre-test about the objective, tools and process of data collection. Before the actual data collection, the quantitative questionnaire was tested on 5% of the total samples that is on 19 women to check reliability of the tool. The pretest was done outside of the study area at agena town which is 32km far. Sequences of the question, grammar and spelling errors were amended. Both data collectors and supervisors are fluent speakers of the Amharic language. Supervisors supervised and checked their respective Kebeles during data collection time. Every questionnaire was cross checked daily by the supervisors and the principal investigator. Data was entered using Epi-data 3.1 and then exported to SPSS 21 for analysis.

4.11 Ethical considerations

Ethical clearance was obtained from the institutional Review Board (IRB) of Jimma University, institute of Health Science. Official letter was written from school of Nursing and Midwifery for wolkite town Health office. Other necessary permissions were gained from wolkite town Health office. Verbal and written consent was obtained from each participant after thorough explanation of the purpose of the study. Participation in the study was on a voluntary base. All responses were kept confidential and anonymous.

4.12 Dissemination plan

The findings of this study will be disseminated to Jimma University, institute of health science and school of Nursing and Midwifery, wolkite town Health office. The findings will be also disseminated to different stakeholders those who have a contribution to improve maternal and child health services. Finally an effort will be made to present in various seminars and workshops and for publication in national or international journals.

CHAPTER FIVE: RESULT

5.1. Socio demographic characteristics of respondents

From a total of 368 mothers selected to participate, 355 mothers were completed the interview making the response rate of 97%. The mean age of the respondents was 27.7(SD± 6.19) years. Majority of the mothers had primary 96(27.0%) as their highest educational attainment. Two hundred ten (59.2%) mothers were house wife. Regarding husband occupational status 90(25.4%) of them were government employee. Regarding family monthly income 106(29.9%) of the respondent had 3000-5000ETB monthly income.

Table: 1. Socio-demographic characteristics of mothers in wolkite town, gurage zone, SNNPR, Ethiopia, 2017. (N = 355)

Variables	Category	Frequency	Percent (%)
Mothers age in years	15-24	113	31.8
	25-34	200	56.3
	35+	42	12
Marital status	married	314	88.5
	divorced	19	5.4
	others♣	22	6.2
Living with partner	yes	259	73.0
	no	96	27.0
Family size	≤5	328	92.4
	>5	27	7.6
Ethnicity	Guragae	183	51.5
	Amhara	73	20.6
	Kebena	50	14.1
	other¥	49	13.8
Religion	orthodox	150	42.3
	Muslim	124	34.9

	others♣♣	81	22.8
Mother's educational status	No formal education	128	36.1
	primary	96	27.0
	secondary	61	17.2
	diploma and above	70	19.7
Husband educational status	No formal education	105	29.6
	primary	98	27.6
	Secondary	70	19.7
	diploma and above	82	23.1
Mother occupation	house wife	210	59.2
	government employee	60	16.9
	merchant	38	10.7
	others€	47	13.3
Husband occupation	government employee	90	25.4
	merchant	83	23.4
	daily laborer	80	22.5
	private employee	71	20.0
	other¥¥	31	8.7
Family monthly Income	1200	90	25.4
	1200-3000	68	19.2
	3000-5000	106	29.9
	≥5000	91	25.6
Type of communication media used	Television	260	73.2
	Radio	95	26.8

Key: ¥ =Oromo, wolene, hadiya, silte, wolaita, kembata   ¥¥ = driver, carpenter, guard, student ♠♠= protestant, catholic ♠= separate, divorced €= daily laborer, private employee, student

5.2. Obstetrics history of the respondents

Among the interviewees, 277(78.0%) of them attend ANC follow up for their last pregnancy. Two hundred and thirty four (65.9%) mothers were gave their last birth at health institution. Seventy one (20.0%) of mothers had PNC follow up in last delivery.

Table: 2. Obstetrics characteristics of mothers in wolkite town, gurage zone, SNNPR, Ethiopia, 2017. (n= 355)

variables	Category	frequency	Percent (%)
no of pregnancy	1-3	261	73.5
	4-6	80	22.5
	>6	14	3.9
no of birth	1	150	42.3
	2-4	174	49.0
	>4	31	8.7
no of children alive	≤4	306	86.2
	>4	49	13.8
ANC follow up	yes	277	78.0
	no	78	22.0
no of ANC follow up	<4	190	68.6
	4	87	31.4
place of last birth	health institution	234	65.9
	home	121	34.1
PNC follow up	yes	71	20.0
	no	284	80.0
no of PNC follow up	<3	66	91.7
	≥3	6	8.3

From a total of 355 mothers interviewed 19(5.4%) mothers had child died during neonatal period. The cause of death for those neonates were cough (difficulty to breath) 8, inability to feed 9, diarrhea 5, vomiting 7 and yellow skin 2. From 19 neonates, 9 of them were gained treatment from health institution for their illness before died.

5.3. Mothers knowledge about neonatal danger sign

Out of the total 355 respondents, 281(79.2%) of them had information (heard) about neonatal danger sign. The newborn danger sign for which there was high awareness among mothers was diarrhea 160(57.3%), fever 136(48.4 %) and followed by persistent vomiting 127(45.2%).

Table: 3. Distribution of mothers by their knowledge about neonatal danger sign in wolkite town, gurage zone, SNNPR, Ethiopia, 2017.

variable	response	frequency	Percent (%)
Heard about neonatal danger sign	yes	281	79.2
	no	74	20.8
list of neonatal danger sign	Diarrhea	160	57.3
	Fever	136	48.4
	Persistent vomiting	127	45.2
	Difficulty/fast breathing	71	25.3
	Poor feeding or unable to suckle	55	19.6
	Baby is cold	31	11.1
	Convulsion	37	13.2
	Lethargy/unconsciousness	10	3.6
	Yellow Skin color (jaundice)	4	1.4
	Other[*]	20	6.5

Key: * = skin infection, ear problem, red eyes, crying and tonsil

From mothers who were heard about neonatal danger signs, they asked about their source of information on neonatal danger sign, they stated that they gained information from media

113(40.1%) , health professional 84(21.1%), friends 60(17.2%), neighbors 43(12.1%), reading books/newspaper 25(8.9%).

The overall knowledge level o f study participants.
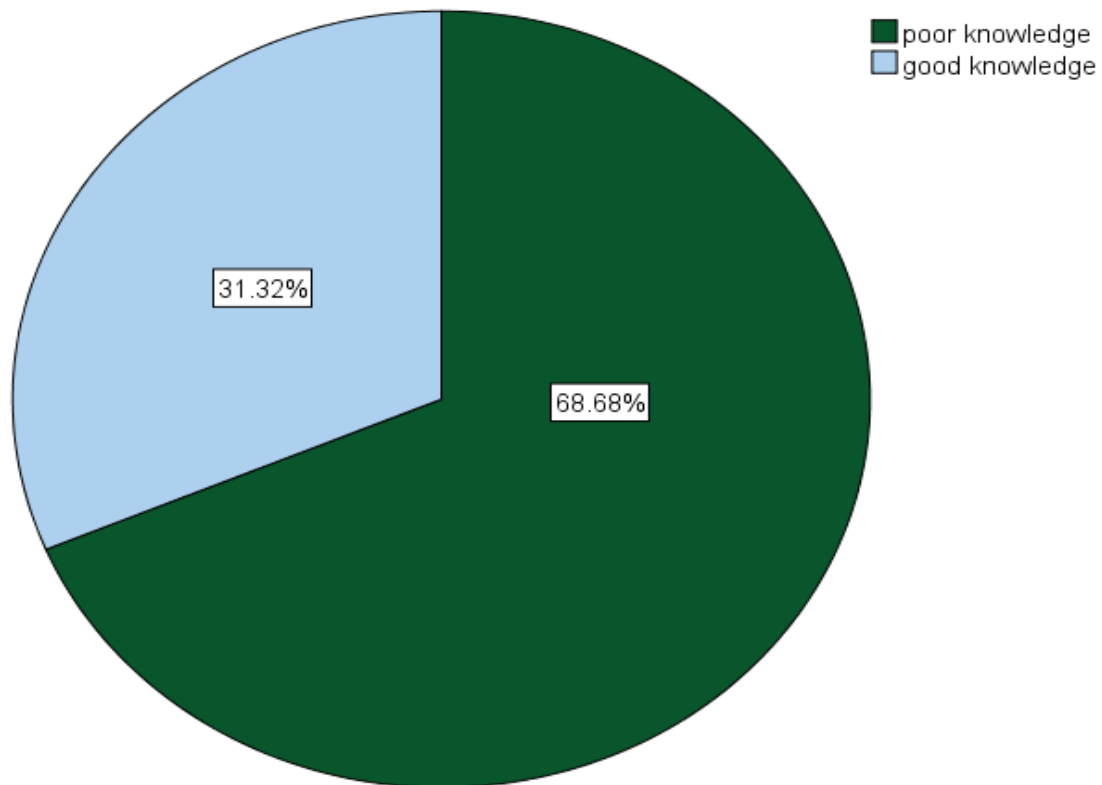
Fig.3: knowledge level of mothers in wolkite town, gurage zone, SNNPR, Ethiopia, 2017.

Majority of mothers 84(26.2%) responded that they didn't know the cause of neonatal illness and followed by hunger 79(24.5%).

Table: 4. Mothers response about cause of neonatal illness in wolkite town, gurage zone, SNNPR, Ethiopia, 2017.

variable	response	frequency	Percent
Cause of neonatal illness	lack of cleanliness	68	20.6
	hunger	79	24.5
	coldness	64	19.1
	evil spirit or eye	31	7.4
	i don't know	84	26.2
	other	6	2.1

5.4. Practice of mothers for neonatal danger signs

From a total of mothers asked to respond weather they had a sick neonate in the last one year or not, 231(65.1%) of mothers reported that their neonate was sick. The most type of clinical manifestation observed on neonates was fever 62(27.0%), diarrhea/loose stool 43(18.7%), cough or breathing problem 55(23.9%), vomiting 33(14.3%), convulsion 5(2.2%), lethargy 7(3.0%), inability to feed/suckle 18(7.8%), jaundice 4(1.7%). Regarding place of seeking a care 78(33.8%) of mothers preferred place of seeking a care for their sick neonate was home, 82(32.0%) take to health institution, 56(24.2%) take to traditional healers and 15(6.5%) were do nothing. The home treatments mothers gave for their sick child were "damakesie", garlic, "tenadam", honey, a mixture of lemon and ash put on neonate's head for tonsil, match stick for convulsion, tepid sponging for fever, exposure to sunlight for jaundice, rubbing by coconut oil for cold body.

The majority 118(51.1%) of mothers continued breast feeding for their sick neonate while 113(48.9%) were not. The reason why they didn't continued breast feeding was 53(45.7%) due vomiting, 49(41.4%) chocking, 11(7.8%) diarrhea and 21(19.3%) don't know.

Regarding actions taken for persistent vomiting, 61(34.3%) of mothers take their sick neonate to health institution, 33(18.5%) of the mothers' stop breast feeding. Fifty nine (40.4%) of mothers were take their sick neonate faced by diarrhea to health institution and 43(29.5%) of them give home remedies. Eighty nine (44.9%) mothers were bring to health institution a neonate with breathing problem followed by 67(33.8%) to traditional healer.

Table5: Actions taken by mothers for danger signs in wolkite town, gurage zone, SNNPR, Ethiopia, 2017.

Variables	Category	Frequency	Percent
	stop breast feeding	33	18.5
	give home treatment	56	31.5
persistent vomiting	take to health institution	61	34.3
	take to tradition healer	19	10.7

	i don't know	9	5
	Total	178	100.0
Diarrhea	take to health institution	59	40.4
	i give home treatment	43	29.5
	take to traditional healer	32	21.9
	do nothing	12	8.2
	Total	146	100.0
Breathing problem	take to health institution	89	44.9
	take to traditional healer	67	33.8
	do nothing	42	21.2
	Total	198	100.0
Fever	take to health institution	79	37.8
	give home treatment	94	45.0
	take to traditional healer	36	17.2
	Total	209	100.0
Convulsion	take to health institution	5	19.2
	give home treatment	13	50.0
	take to traditional healer	8	30.7
	Total	26	100.0
Jaundice	take to health institution	3	20.0
	give home treatment	6	40.0
	take to traditional healer	6	40.0
	Total	15	100.0
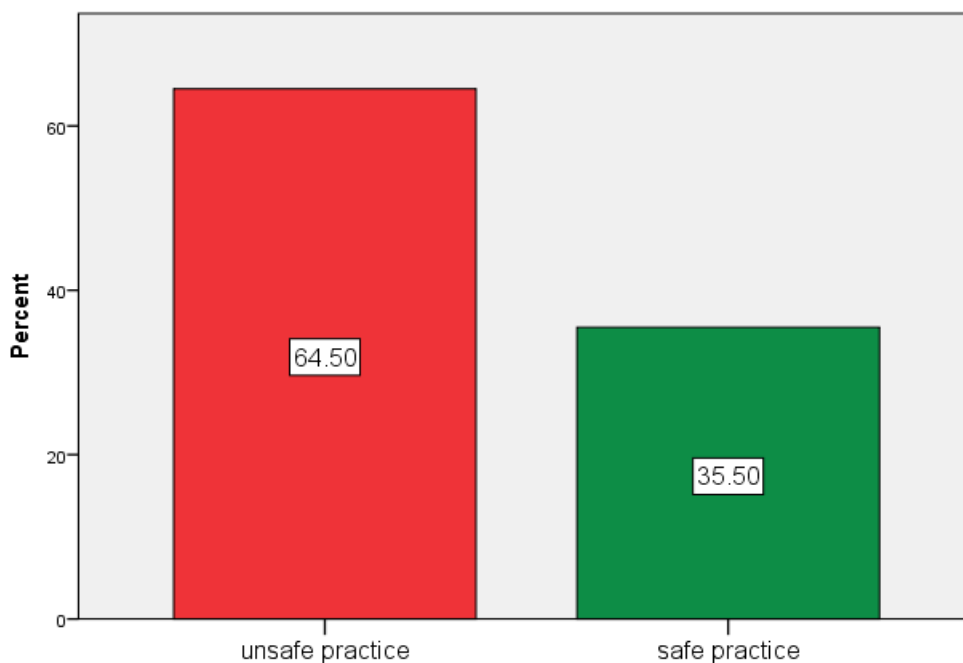
Fig.4. practice category of mothers in wolkite town, gurage zone, SNNPR, Ethiopia, 2017.

Factors associated with maternal knowledge about neonatal danger signs

In multivariable logistic regression, mothers' educational status, income, place of birth and source of information are factors that contribute for mothers' knowledge towards neonatal danger sign.

Mothers of secondary and above educational level were 1.21 times to be knowledgeable as compared to primary educational level (AOR= 1.21, CI [0.049, 0.677]). mothers who gain less than 1200 birr monthly income were 56% less likely knowledgeable than those gain greater than or equal to 5000 birr (AOR= 0.44, CI [0.201,0.964]).

Mothers who have gave birth in health institution for their last pregnancy were nearly two times more likely knowledgeable than as compared to mothers who had given birth at home (AOR= 1.867, CI [1.102, 3.164]). Those mothers whose source of information was friends and neighbors were 83% less likely knowledgeable as compare to mothers who gain information from health professionals (AOR= 0.173, CI [0.034, 0.875]).

Table6: Bivariate and Multivariate logistic regression for factors associated with mother's knowledge about neonatal danger signs in wolkite town, gurage zone, SNNPR, Ethiopia, 2017.

Variable	knowledge level		Odds ratio and 95%CI	
	Poor	Good	Crude	Adjusted
Age				
15-24	65(33.7%)	33(37.5%)	0.609(0.238, 1.556)	
25-34	110(57.0%)	42(47.7%)	0.458(0.184, 1.140)	
35-44	12(6.2%)	10(11.4%)	1	
45-49	6(3.1%)	3(3.4%)	0.600(0.119,3.032)	
Live with partner				
Yes	137(71.0%)	50(56.8%)	1	
No	56(29.0%)	38(43.2%)	1.86(1.192,3.472)	
Family size				
<=5	183(69.6%)	80(30.4%)	1	
>5	10(55.6%)	8(44.4%)	1.830(0.696,4.809)	
Mothers educational status				
no formal education	55(59.8%)	37(40.2%)	1.692(0.947,3.022)	0.56(0.094, 1.852)
primary	55(75.3%)	18(24.7%)	0.823(0.422,1.605)	1.21(0.049,0.677)a
secondary and above	83(71.6%)	33(28.4%)	1	
Husband educational status				
no formal education	45(62.5%)	27(37.5%)	1.605(0.874, 2.950)	
primary	49(67.1%)	24(32.9%)	1.311(0.707, 2.430)	
secondary and above	99(72.8%)	37(27.2%)	1	
Income				
1200	56(74.7%)	19(25.3%)	0.497(0.245, 1.009)	0.44(0.201,0.964)b
1200-3000	35(68.6%)	16(31.4%)	0.669(0.312, 1.434)	0.462(0.196,1.086)
3000-5000	61(70.9%)	25(29.1%)	0.600(0.307, 1.172)	0.47(0.226,1.003)
>=5000	41(59.4%)	28(40.6%)	1	

no of pregnancy				
1-3	147(70.7%)	61(29.3%)	1	
4-6	42(65.6%)	22(34.4%)	0.332(0.086, 1.278)	
>6	4(44.4%	5(55.6%)	0.419(0.102, 1.720)	
No of birth				
1	84(71.8%)	33(28.2%)	0.847(0.496, 1.447)	
2-4	97(68.3%)	45(31.7%)	2.12 (0.723, 4.465)	
>4	12(54.5%)	10(45.5%)	1	
ANC follow up				
yes	161(71.2%)	65(28.8%)		
no	32(58.2%)	23(41.8%)	1	
Place of birth				
health institution	139(73.2%)	51(26.8%)	0.535(0.316, .907)	1.867(1.102, 3.164)c
home	54(59.3%)	37(40.7%)	1	
PNC follow up				
yes	50(79.4%)	13(20.6%)	2.02(0.240, 0.807)	
no	143(65.6%)	75(34.4%)	1	
Source of information				
health professionals	51(78.5%)	14(21.5%)	1	
Media	117(63.2%)	68(36.8%)	2.117(1.091, 4.107)	1.477(0.721, 3.029)
Other*	25(92.6%)	2(7.4%)	0.291(0.061, 1.383)	0.173 (0.034, 0.875)d
Have sick neonate				
yes	130(71.4%)	52(28.6%)	1.429(0.849, 2.405)	
no	63(63.6%)	36(36.4%)	1	

Key: 1= reference   a, b,c,d = significant, p-value<0.05;   a =0.03   b= 0.04   c= 0.02   d= 0.034

*= friends, neighbors

Factors associated with maternal practice about neonatal danger signs

In multivariate logistic regression, husband educational status, husband occupational status, place of birth and attending PNC were the factors that significantly affect maternal practice for neonatal danger signs.

Mothers whose Husbands' educational level was secondary were 82% less likely visit health institution as compared to husbands diploma and above education level (AOR= 0.183, CI [0.049, 0.677]). Similarly, those respondents whose husband's occupation was private employee were 87% less likely not to visit health institution as compared to merchants (AOR= 0.132, CI [0.032, 0.543]).

Those mothers who deliver their last child in health institution were 6.45 times bring their sick neonate to health institution as compared to mothers who had given birth at home (AOR=6.45, CI [2.617, 7.185]). Similarly, mothers who had PNC follow up were 6.19 times more likely to go health institution as compared to those who did not follow PNC care (AOR= 6.19, CI [1.070, 5.626]).

Table7: Bivariate and multivariate logistic regression for factors associated with mother's practice about neonatal danger signs in wolkite town, gurage zone, SNNPR, Ethiopia, 2017.

Variables	Practice category		Odds Ratio and 95% CI	
	unsafe	safe	Crude	Adjusted
Age				
15-24	45(66.2%)	23(33.8%)	3.750(1.020, 13.786)	
25-34	83(62.4%)	50(37.6%)	2.400(0.678, 8.491)	
35-49	21(70.0%)	9(30.0%)	1	
Marital status				
married	121(60.8%)	78(39.2%)	4.53(1.384, 8.178)	
single	28(87.5%)	82(35.5%)	1	
Living with partner				
yes	100(59.5%)	68(40.5%)	0.42(1.402, 8.616)	

no	49(77.8%)	14(22.2%)	1	
Family size				
<=5	137(64.0%)	77(36.0%)	4.878(.631, 37.701)	
>5	12(70.6%)	5(29.4%)	1	
Mother educational status				
no formal education	53(73.6%)	19(26.4%)	0.110(0.038,0.319)	
primary	42(63.6%)	2436.4%)	0.554(0.255,1.201)	
secondary	31(75.6%)	10(24.4%)	0.304(0.114,0.813)	
diploma and above	23(44.2%)	29(55.8%)	1	
Husband educational status				
no formal education	46(75.4%)	15(24.6%)	0.143(0.053,0.382)	0.355(0.068, 1.851)
primary	41(70.7%)	17(29.3%)	0.341(0.151,0.771)	0.418(0.094, 1.852)
secondary	38(73.1%)	14(26.9%)	0.203(0.079,0.524)	0.183(0.049,0.677) a
diploma and above	24(40.0%)	36(60.0%)	1	
Mother occupation				
house wife	89(66.4%)	45(33.6%)	1	
merchant	18(72.0%)	7(28.0%)	0.769(0.299, 1.976)	
government employee	21(47.7%)	23(52.3%)	2.166(1.085, 4.326)	
private employee	6(75.0%)	2(25.0%)	0.659(0.128, 3.398)	
Other	15(75.0%)	5(25.0%)	0.659(0.225, 1.929)	
Husband occupation				
Merchant	33(58.9%)	23(41.1%)	1	
daily laborer	36(80.0%)	9(20.0%)	0.359(0.145, 0.886)	0.371(0.104, 1.323)
government employee	33(53.2%)	29(46.8%)	1.261(0.608, 2.615	0.391(0.122, 1.256)
private employee	31(63.3%)	18(36.7%)	0.833(.379, 1.832)	0.132(0.032, 0.543)b
Income				
1200	35(61.4%)	22(38.6%)	1.809(0.757,4.322)	
1200-3000	32(74.4%)	11(25.6%)	0.752(0.255,2.216)	
3000-5000	39(56.5%)	30(43.5%)	1.636(0.703,3.808)	

>=5000	43(69.4%)	19(30.6%)	1	
Place of birth				
health institution	83(53.2%)	73(46.8%)	3.906(4.716, 6.335)	6.45(2.617, 7.185)c
home	66(88.0%)	9(12.0%)	1	
PNC follow up				
yes	16(31.4%)	35(68.6%)	5.037(2.538, 9.996)	6.19(1.070, 5.626)d
no	133(73.9%)	47(26.1%)	1	

Key. *1= reference   a,b,c,d = significant, p-value<0.05; a= 0.011   b= 0.005   c= 0.004   d= 0.034*

CHAPTER-SIX: DISCUSSION

Reducing child morbidity and mortality requires immediate caregiver's recognition of suggestive danger signs in the child and visiting the nearby health facility. But in this study only 31.3% of mothers have good knowledge about neonatal danger sign. This knowledge level report is higher when compared to the reports of the studies conducted in North West of Ethiopia 18.2% (20), slightly lower than the study conducted in Gedeo zone SNNPR, Ethiopia which is 32.4% (21) and higher than the study done in Southwestern Rural Uganda 14.8% of mothers were knowledgeable (8). This discrepancy may be due to sample size variation, time gap, residence and socio cultural variation.

The result of this study showed that 65.1% of mothers had seen a sick neonate in their family in the past one year and only 32.0% of them take their neonate to health institution. This study varies with study conducted in Wardha, India in which 41.8% of sick neonates got medical treatment(22). And 47.7% of Nigerian mothers took the child to the hospital immediately without any home intervention (24). These variations might be explained by differences in the disease spectrum between these different study areas and knowledge level of mothers.

This study reviled that maternal educational level was significantly associated with knowledge of mothers towards neonatal danger sign. Mothers who attended secondary and above were 1.21 times more knowledgeable when compared to primary educational level. The study conducted in north west of Ethiopia showed that those mothers who attended; collage and above were knowledgeable than primary (20). The possible justification for this could be educated mothers acquire knowledge through their academic life and educated mothers take their sick neonate to health institution so they gain additional information from health providers.

Monthly house hold income was found to have association with women to have knowledge of danger sign. Those women whose household income was less than 1200ET birr monthly income were 56% less likely knowledgeable than those gain greater than or equal to 5000ET birr. This may be due to those mothers who have financial problem are less likely access to media. An increased exposure to media also increased the knowledge of mothers on neonatal danger signs.

Women's place of birth and source of information were significant predictors for knowledge of neonatal danger sign. Mothers who have gave birth in health institution in their last pregnancy were nearly two times knowledgeable than as compared to mothers who had given birth at home. Those mothers their source of information other than health professionals were 83% less likely knowledgeable as compare to mothers who gain information from health professionals. The study done in Kenya, showed that mothers receiving information on neonatal danger signs from care provider are increased having knowledge of neonatal danger sign (27). The possible justification for this is mothers give birth in health institution receives post natal counseling by health professionals on appropriate time; this increases their awareness and they pied attention what they told.

Husband educational level is important to bring the neonate to health institution. Those mothers their husbands' educational level secondary were 82% less likely to visit health institution as compared to diploma and above. Similarly, those respondents whose husband's occupation private employee was 87% less likely to take their sick neonate to health institution as compared to merchants. Education of mother and father and their work status have strong effect on child survival in developing countries. Educated women tend to provide better healthcare, hygiene and are more likely to seek help when a child is ill (29). This may due to educated husbands are more informed and can help their wives' to take the sick neonate to health institution and merchants may gain more income so they can fulfill medical payments.

Place of birth and PNC follow up were statistically significant to bring the sick neonate to health institution. Those mothers who deliver their last child in health institution were 6.45 times bring their sick neonate to health institution as compared to mothers who had given birth at home. Similarly, mothers who had PNC follow up were 6.19 times more likely to go health institution when compared to those who did not follow PNC care. The possible reason may mothers give birth at health institution and have PNC follow up are counseled about neonatal danger sign; this increase knowledge of the mother concerning the neonatal danger signs. They become alert for those signs and this help to bring their neonate to health institution when they become sick.

Strength and Limitation of study

Strength

Strength of this study is community-based. This help to identify the problem at grass rote level

Limitation

Since this study used unprompted spontaneous answers it may not reflect women's recognition of the danger signs. The study is cross –sectional it may not be strong to demonstrate direct cause and effect between dependent and independent variables. The study was based on reported-rather than observed practices. Therefore, there may be a risk that mothers may report what was expected of them but their actual practices may be different. Social desirability bias and interviewer bias. Lack of adequate similar studies to make comparative discussion.

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

7.1 Conclusion

The findings of this study showed that there was poor knowledge of mothers towards neonatal danger signs in the studied area. Mothers practice for neonatal danger sign was unsafe; most mothers take their sick neonate to traditional healers and give home remedies. Maternal educational level, household monthly income, place of birth and source of information are contributing factors for good knowledge of danger sign. Husbands' educational level and occupation, place of delivery and PNC follow up were statistically significant for mothers to bring their neonate to health institution when they become sick.

7.2 Recommendation

Based on the findings the following recommendations are forwarded:-

➢ Health care providers/NGOs need to create awareness of the community about danger sign of new born and the importance of seeking care from health center.

➢ Health care providers should give education on neonatal danger sign during pregnancy and after delivery during PNC follow up.

➢ Health extension workers should design IEC/BCC activities on Child health with special focus on MCH.

➢ Kebele leaders need strengthening government structures including one to five teams to increase knowledge of the study participants.

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ANNEX I: QUESTIONNAIRE
CONSENT FORM

Hello, my name is _____. I come here just to collect a data for a thesis title named " mothers' knowledge and practice regarding neonatal danger sign and associated factors in wolkite town, gurage zone, SNNPR, Ethiopia 2017.This is going to be carried out by Mr. -------------- who is a postgraduate student of Jimma University, faculty of Health Science, school of Nursing and Midwifery. The aim of this study is to assess mothers' knowledge and practice about neonatal danger sign and associated factors in wolkite town. You have the right to refuse or withdraw from the study. I can assure you that your current or future medical services will not be affected if you refused to participate or with draw from the study. The inquiry is confidential and the information provided by you will not identify with any third person and it will only be used for the aim of the study.

Can you spare me 15-20 minutes to answer my question? Can we begin?

1. Yes ---------------------------
2. No ---------------------------

WRITTEN CONSENT FORM

In signing this document, I am giving my consent to participate in the study titled "mothers' knowledge and practice about neonatal danger sign and associated factors in wolkite town, gurage zone, SNNPR, Ethiopia 2017." I have understood that participation in this study is entirely voluntarily. I have been told that my answers to the questions will not be given to anyone else and no reports of this study ever identify me in any way. I understood that participation in this study does not involve risks except the time spent for completing the interview. I understood that Mr. WALELLIGN ANMUT is the contact person if I have questions about the study or about my rights as a study participant.

Address of principal investigator: - Mr. WALELLIGN ANMUT

Tel: +251-912320287/+251-920960805 E-mail: endua2020@gmail.com

Participant's signature: _____ date: _____ _____

001. Respondent's number/ code _____

Instruction: Circle the number/code corresponding the appropriate answer provided and where applicable write the required responses in the spaces provided.

Section I: Socio-economic information

S.NO	Questions	Answers	Skip
Q1	How old are you now?	1._____years 2. I don't know	
Q2	What is your Current marital status?	1. Married 2. Single 3. Divorced 4. Widowed	
Q3	Are you currently living with your partner?	1. Yes 2. No	
Q4	What is your family size?	In no. ……….	
Q5	Which ethnic group does you belongs to?	1. Guragae 2. Kembata 3. Kebena 4. Amhara 5. Other specify _____	
Q6	What is your religion?	1. Protestant 2. Orthodox 3. Muslim 4. Catholic 5. Other specify _____	
Q7	What is your educational status?	1. No formal education 2. Primary 3. secondary 4. Diploma and above	
Q8	What is your Husband's educational status?	1. No formal education 2. Primary 3. secondary 4. Diploma and above	

Q9	What is your Occupation?	1. House wife 2. Merchant 3. Daily laborer 4. Government employee 5. Private employee 6. Student 7. Other Specify _____	
Q10	What is your husband's Occupation?	1. Merchant 2. Daily laborer 3. Government employee 4. Private employee 5. Student 6. Other Specify _____	
Q11	What type of communication media did you have at home?	1. television 2. radio	
Q12	What is your average monthly household income?	------------------------ ET birr	

Section II: Obstetric characteristics

S.N	Questions	Answers	Skip
Q13	How many times did you become pregnant?	Number ------------	
Q14	How many times did you give birth?	Number _____	
Q15	How many alive children did you have?	Number _____	
Q16	Have you ever had a child died after birth within 28 days?	1.Yes 2. No if the answer is no	Skip to Q19
Q17	What was the reason (cause)?	Malaria ……………….…..……..…1 Diarrhea/loose stools ………….…..…..2 Cough/breathing problem ………......3 Inability to feed ………………….…..4 Vomiting ..……………….…….......5 Other specify ………………..……6	

Q18	If yes for Q16, have they provided treatment within 28 days?	1. Yes 2. No	
Q19	Have you ever had an ANC follow up?	1. Yes 2. No if the answer is no	Skip to Q21
Q20	If yes, how many ANC follow up did you had?	1. <4 visits 2. 4 visits	
Q21	Where did you give birth for the last child?	1.Health institution 2. home	
Q22	Did you have PNC follow up?	1.Yes 2. No if the answer is no	Skip to Q 24
Q23	No. of PNC visits	1. <3 2. ≥3	

Section III: Knowledge about neonatal danger signs

s.no	Questions	Answers	Skip
Q24	Have you ever heard about neonatal danger sign?	Yes …….…...……………………….1 No ……….…….……………. …………..2	If 2 go to Q28
Q25	Can you mention neonatal danger signs? *(More than one answer is possible)*	Difficult/fast breathing ……………………..1 Lethargy/unconsciousness ...……………….2 Convulsion …………………..………...…..3 Fever ……………………………....……..4 Baby is cold ……………………......…..5 Poor feeding or unable to suckle ……….6 Persistent vomiting ….………………….7 Diarrhea ……………………….….....…8 Yellow Skin color (jaundice) …………….9 Other (specify) ….………………….....10	
Q26	From whom did you get the information about neonatal danger signs?	Health professional ….………………….1 Media …………………………………......2 Neighbors …………………….…..……..3 Friends ……………………..……………4 Reading books/newspaper ……………... ...5 Other(specify) ………………………….6	
Q27	Do you know what causes neonatal illnesses? *(More than one answer is possible)*	Lack of cleanliness ….……………………1 Hunger ………………………………….2 Coldness …….………………………….3 Evil spirit (eye) ……………………….….4 I don't know ……….………………….5 Other (specify) ………... ………………….6	

Section IV: practice of mothers for neonatal danger sign

s.no	Questions	Answers	Skip
Q28	Have you ever seen a sick neonate in your own family in the past 1 year?	Yes ……………………………………..……1 No ………………………………………………..2	If 2 stop
Q29	What type of manifestation you saw on him/her?	Fever …………………………………………1 Diarrhea/loose stools ……………..……………..2 Cough/breathing problem …………………..……..3 Vomiting ……………………………..…………4 Convulsion …………………………………….5 Lethargy ……...…………………………….6 inability to feed/suck. ..…………………………..7 Other specify ..……………………………….8	
Q30	Where did you bring the neonate for any of manifestations of illness for seeking care?	Take to Health institution …………………….1 I gave Home treatment ……………………….2 Take to Traditional healer …………..………….3 Do nothing ……………………………......…...4 Others ……………………………………..5	Other than 2 go to Q32
Q31	If the answer is home treatment, what are the treatments?	……………………………	
Q32	What you have done for diarrhea?	Give home remedy ………………………..……1 Take to health institution ………………….......2 Not give any fluid orally ………………………..3 I don't know …………………………………..…4 Other (specify) ……………………………..…5	
Q33	What you did to a neonate that had persistent vomiting?	Stop breast feeding …………………….…..…..1 give home treatment ....……………………….....2 Take to health institution …………………...…..3 take to traditional healer ……...……………..…4 I don't know ……………………………...…..5 Other (specify) ……………………………..…..6	
Q34	Did you continue breast feeding for your sick neonate?	Ye ……………………………………………..1 No …………………………………………..…..2	
Q35	Reason for not continuing breast feeding?	-------------	
Q36	What you did for convulsing neonate?	Take to health institution ………..…………..…1 I gave Home treatment ………………………….2 Take to Traditional healer …………………..…..3 Do nothing ……………………………......…….4 Others …………………………………..…..5	

Q37	What you did for the neonate face breathing problem?	Take to health institution ………..……..………1 Take to Traditional healer ……………..………….2 Give home treatment ……………………………….3 Do nothing ………………………………....……….4 Others ……………………………..…….... 5	
Q38	What you did for the neonate faced by fever?	Take to health institution ………..……………1 I gave Home treatment …………………………2 Take to Traditional healer ………….…………….3 Others ……………………………………..…...4	
Q39	What you did for neonate faced by jaundice?	Take to health institution ………..………….…1 I gave Home treatment …………….………...2 Take to Traditional healer ……….….……….3 Others ……………………………..…….4	

ቃለ-መጠይቅ የአማርኛ ትርጉም

ቃለ-መጠይቅ

መግቢያ

ጤና ይስጥልኝ ስሜ _____ እኔ በጅማ ዩኒቨርሲቲ የጤና ሳይንስ ፋካልቲ፣ ነርሲንግ እና የሚድዋይፈሪ ትምህርት ክፍል የማስተር ተማሪ በሆነው ዋለልኝ አንሙት በጊዜያዊነት ተወከዬ ነው ይህን ጥያቄና መልስ ይዤ የመጣሁት፡፡ ይህ ጥናት የሚካሄደው እናቶች አዲስ የተወለዱ ጨቅላ ህፃናት አደገኛ የበሽታ ምልክቶች ላይ ያላቸውን እውቀት እና ከሚያደርጉት ተግባር ጋር የተያያዙ ጉዳዮችን ለመፈተሽ ነው፡፡ ይህ ጥናት ከእናቶች ጋር በቀጥታ የተያያዘ ስለሆነ በጥናቱ እንዲሳተፉ በእጣ ከተመረጡት እናቶች አንዱ እርሶ ነዎት፡፡ ስለዚህ እዚህ ጥናት ላይ እንዲሳተፉና አስፈላጊውን መረጃ እንዲሰጡን በትህትና እንጠይቃለን፡፡ ይሁን እንጂ ማንኛውንም ጥያቄ አለመመለስ ይችላሉ፡፡ እንዲሁም በማንኛውም ጊዜ ጥያቄውን ማቋረጥና በጥናቱ አለመሳተፍ ይችላሉ፡፡ ጥያቄና መልሱ 20 ደቂቃ ይወስዳል፡፡ ይህ በግልዎ የሚሰጡት መልስም በሚስጢር የሚጠበቅ ስለሆነ ከጥናቱ ውጤት ጋር በምንም የሚያያዝ አይደለም፡፡ ላረጋግጥልዎ የምፈልገው ግን ይህ የሚሰጡት መልስ በጣም አስፈላጊ የሚሆነው ጥናቱን ለማጥናት ብቻ ሳይሆን አዲስ የተወለዱ ህፃናትን ሕይወት የሚቀጥፉ አደገኛ የበሽታ ምልክቶችን ለእናቶች በማሳወቅ እና የጤና አገልግሎት የሚፈልጉበትን ባህሪ የማሳደግ እቅድ ለማውጣት እና በተግባር ለማዋል እንዲሁም አዲስ ለሚወለዱ የህፃናት ሕይወት ለማዳን የሚጠዳን አስተያየት ለማግኘት ነው፡፡

በመጥይቁ ለመሳተፍ ፍቃደኛ ነዎት? አዎ......................ይቀጥሉ

አይደለሁም...ያቁሙ

የጥያቄ ወረቀቱ መለያ ቁጥር _____

የቃሐፍ የስምምነት ውል

በወልቂጤ ከተማ "እናቶች አዲስ የተወለዱ ህፃናት አደገኛ የበሽታ ምልክቶች ላይ ያላቸውን እውቀት እና የሚያደርጉት ተግባር" በሚል ርዕስ በሚደረገው ጥናት አላማውን ተረድቼ፣ ተሳትፎዬ በሙሉ ፈቃደኝነቴ ላይ የተመሠረተ እንደሆነ አውቄ ፣ በዚህ ጥናት ውስጥ የምሰጠው መልስ ከጥናቱ ቡድን በስተቀር ለማንም እንደማይሰጥ፣ በዘገባው ማንነቴን የሚገልፅ ነገር እንደማይኖር፣ መሳተፌ ጊዜዬን ከመውሰዱ ውጪ ምንም አይነት ጉዳት እንደማይደርስብኝ እና እንደ ጥናቱ ተሳታፊነቴ ስለ ጥናት ፅሐፉም ሆነ ስለ መብቴ የጥናቱ ባለቤት የሆነውን አቶ ዋለልኝ አንሙትን መጠየቅ የምችል መሆኑን ተረድቼ መሳተፌን በፊርማዬ አረጋግጣለሁ፡፡ ፊርማ _____

የተመራማሪው አድራሻ

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ቀን_____

ቃለ መጠይቁ የተደረገበት ቦታ _____

መመሪያ

ለሚሰጡት መልስ ቁጥሩን ወይም ኮዱን ክበብ በተጨማሪም በባዶ ቦታው ላይ የሚሰጡትን መልስ ጻፍ

ክፍል I፡ ሥነ ህዝብና ማህበራዊ ጉዳዮች

ተ.ቁ	ጥያቄ	ምላሽ	አለፍ
ጥ1	እድሜዎ ምን ያህል ነው?	1._____ አመት 2. አላዉቀዉም	
ጥ2	የጋብቻ ሁኔታ ምንድን ነው?	1. ያገባ 2. ያላገባ 3. የተፋታ 4. የትዳር ጉዋደኛ የሞተባት	
ጥ3	ባሁኑ ስአት ከባለበትዎ ጋር ነዉ የሚኖሩት?	1. አዎ 2. አይደለም	
ጥ4	ስንት ልጆች አሉዎት?	በቁጥር -----------------	
ጥ5	ብሔርዖ ምንድነው?	1. ጉራጌ 2. ከምባታ 3. ቀቤና 4. አማራ 5. ሌላ _____	
ጥ6	ሀይማኖትዎ ምንድነው?	1. ፕሮቴስታንት 2. ኦርቶዶክስ 3. ሙስሊም 4. ካቶሊክ 5. ሌላ _____	
ጥ7	የትምህርት ደረጃዎት?	1. መደበኛ ትምህርት የሌላት 2. የመጀመሪያያደረጃ 3. ሁለተኛ ደረጃ 4. ዲፕሎማና ከዛ በላይ	
ጥ8	የባለቤትዖ ትምህርት ደረጃ?	1. መደበኛ ትምህርት የሌለው 2. የመጀመሪያያደረጃ 3. ሁለተኛ ደረጃ 4. ዲፕሎማና ከዛ በላይ	
ጥ9	ስራዎት ምንድን ነው?	1. የቤት እመቤት 2. ነጋዴ 3. የቀን ሰራተኛ 4. መንግስት ተቀጣሪ 5. የግል ተቀጣሪ 6. ተማሪ 7. ሌላ _____	

ጥ10	የባለቤትዎ ስራ ምንድን ነው?	1. ነጋዴ 2. የቀን ሰራተኛ 3. መንግስት ተቀጣሪ 4. የግል ተቀጣሪ 5. ተማሪ 6. ሌላ _____	
ጥ11	በቤት ውስጥ የሚጠቀሙበት ብዙሀን ምንድነው?	1. ቲሊቪዥን 2.ራዲዮ	
ጥ12	አማካይ ወርሃዊ ገቢዎ ምን ያህል ይገምቱታል? (በብር)	.... ብር	

ክፍል II: የአርግዝናና የዉልደት ሁኔታ

ተ.ቁ	ጥያቄ	ምላሽ	እለፍ
ጥ13	ስንት ጊዜ ጽንሰው ውቃሉ?	በቁጥር _____	
ጥ14	ስንት ልጅ ወልደዋል?	በቁጥር _____	
ጥ15	ስንት ልጆች በሂዋት አሉዋት?	በቁጥር _____	
ጥ16	ከተወለደ በኋላ በ28 ቀናት ዉስጥ የሞተ ልጅ አለዎት?	1.አዎ 2. የለም መልሱ የለም ከሆነ	ወደ ጥ19
ጥ17	ምክንያቱ ምን ነበር?	ትኩሳት …,,…………....………1 ተቅማጥ ……………………………2 ሳል/የመተንፈስ ችግር ………………....…3 መንቀጥቀጥ …………………………4 መዛለፍለፍ ……………………………5 መመገብ አለመቻል ……………....……6 ትውከት …………………………………7 ሌላ …………………………………8	
ጥ18	አዎ ከሆነ, ህክምና ተደርጎለት ነበር?	1. አዎ 2. የለም	
ጥ19	የቅድም ወሊድ ክትትል አድርገዉ ያዉቃሉ?	1. አዎ 2. የለም መልሱ የለም ከሆነ	ወደ ጥ21

ጥ20	አዎ ከሆነ, ስንት ጊዜ ተከታትለዋል?	1. <4 2. ≥4	
ጥ21	የመጨረሻ ልጅዎን የት ነዉ የወለዱት?	1. ጤና ተቋም 2. ቤት	
ጥ22	የድህረ ወሊድ ክትትል አድርገዉ ያዉቃሉ?	1. አዎ 2. የለም መልሱ የለም ከሆነ	ወደ ጥ24
ጥ23	ስንት ጊዜ የድህረ ወሊድ ክትትል አድርገዋል?	1.<3 2. ≥3	

ክፍል III: የጨቅላ ህፃናት አደገኛ የበሽታ ምልክት እዉቀት

ተ. ቁ	ጥያቄ	ምላሽ	እለፍ
ጥ24	ስለ የጨቅላ ህፃናት አደገኛ የበሽታ ምልክቶች ሰምተዉ ያዉቃሉ?	አዎ ………………………………………1 የለም ………………………………………2	2 ከሆነ ወደ ጥ28
ጥ25	አደገኛ የበሽታ ምልክቶችን ሊጠቅሷቸው ይችላሉ? (ከአንድ በላይ መልስ መስጠት ይቻላል)	የመተንፈስ ችግር ……………………………1 መዘለፍለፍ/እራስን መሳት ………………………2 ማንዘፍዘፍ ……………………………………3 ከፍተኛ ሙቀት ……………………………………4 ሰዉነት መቀዝቀዝ ……………………………………5 ጡት የመጥባት ፍላጎት መቀነስ ……………………………6 ተከታታይ ትዉከት ……………………………………7 ተቅማጥ ……………………………………8 የሰዉነት ቆዳ ቢጫ መሆን ……………………………9 ሌላ ……………………………………10	
ጥ26	ይህን መረጃ ከየት አገኙ?	የጤና ባለሙያ ……………………………1 ከመገናኛ ብዙሃን ……………………………2 ጎረቤት ……………………………3 ጓደኛ ……………………………4 መጽሀፍ/ጋዜጣ በማንበብ ……………………………5 ሌላ ……………………………6	
ጥ27	የእነዚህ የበሽታ ምልክቶች ዋነኛ መንስኤ ምንድን ነው?	የንፅህና ጉድለት ……………………………1 ርሀብ ……………………………2 ብርድ ……………………………3 ቡዳ (መንፈስ) ……………………………4 አላዉቅም ……………………………5 ሌላ ……………………………6	

ክፍል IV: እናቶች ለጨቅላ ህፃናት አደገኛ የበሽታ ምልክቶች የሚወስዱት እርምጃ

ተ.ቁ	ጥያቄ	ምላሽ	እለፍ
ጥ28	ባለፉዉ አንድ አመት ዉስጥ ከቤተሰብ መሀል የታመመ ጨቅላ ህጻን ነበር?	አዎ ....1 የለም 2	2 ከሆነ አቁም
ጥ29	ምን አይነት ምልከት አዩበት?	ትኩሳት ...,,,...1 ተቅማጥ ....2 ሳል/የመተንፈስ ችግር ....3 መነጫነጭ ....4 መዝለፍለፍ ....5 መመገብ አለመቻል ....6 ትውከት ....7 ሌላ 8	
ጥ30	ልጅዎት የጨቅላ ህጻናት አደገኛ ምልከት ቢኖርበት ምን ያደርሃሉ?	ወደ ጤና ተቋም እወስደዋለሁ ....1 የቤት ውስጥ ህክምና እሰጠዋለሁ ....2 ወደ ባህላዊ ህክምና ቤት እወስደዋለሁ ....3 ምንም አላደርግም ....4 ለፈጣሪ እተወዋለሁ ....5 ሌላ ....…….6	
ጥ31	መልሱ የቤት ውስጥ ህክምና ከሆነ፤ ምንድን ነው የምትሰጡት?		
ጥ32	ጨቅላ ልጅዎት በተቅማጥ ሲያዝ ምን የደርጋሉ?	ጡት ማጥባት እቀጥላለሁ ....1 ለምለም/አአርኤስ እሰጣለሁ ....…...2 ወደ ጤና ተቋም እወስደዋለሁ ....3 ምንም ፈሳሽ በአፍ አልሰጥም ....4 አላውቅም ....5 ሌላ 6	
ጥ33	ጨቅላ ልጅዎት የማያቋርጥ ትውከት ሲይዘው ምን ያደርጋሉ?	ጡት ማጥባት አቆማለሁ ....1 ጡት ማጥባት እቀጥላለሁ ....…...2 ወደ ጤና ተቋም እወስደዋለሁ ....3 ለምለም/ኦርኢስ እሰጣለሁ ....…...4 አላውቅም ....5 ሌላ ....……..6	
ጥ34	ጨቅላ ልጅዎት ሲታመም ጡት ማጥባትዎን ይቀጥላሉ?	አዎ ....1 የለም 2	1 ከሆነ ወደ ጥ36
ጥ35	ጡት ማጥባት የሚያቋርጡበት ምክንያት ምንድን ነው?	ትውከት ስለሚያመጣ ....1 ትንታ ስለሚያመጣ ....2 ተቅማጥ ስለሚያመጣ ....3 አላውቅም ....4 ሌላ 5	
ጥ36	ጨቅላ ልጅዎ ሲዝለፈለፍ ምን ያደርጋሉ?	ወደ ጤና ተቋም እወስደዋለሁ ....1 የቤት ውስጥ ህክምና እሰጠዋለሁ ....2 ወደ ባህላዊ ህክምና ቤት እወስደዋለሁ ....3 ምንም አላደርግም ....4 ለፈጣሪ እተወዋለሁ ....5 ሌላ 6	
ጥ37	ጨቅላ ልጅዎ የመተንፈስ ችግር ሲያጋጥመው ምን ያደርጋሉ?	ወደ ጤና ተቋም እወስደዋለሁ ....1 ወደ ባህላዊ ህክምና ቤት እወስደዋለሁ 2	

		ምንም አላደርግም ………………………...………3 ለፈጣሪ እተወዋለሁ ……………………..……4 ሌላ ………………………………………………5	
ጥ38	ጨቅላ ልጅዎ ሲያተኩሰው ምን ያደርጋሉ?	ወደ ጤና ተቋም እወስደዋለሁ ……………………..………1 የቤት ውስጥ ህከምና እሰጠዋለሁ ………………………2 ወደ ባህላዊ ህከምና ቤት እወስደዋለሁ ……….………3 ሌላ ………………………………………………4	
ጥ39	ጨቅላ ልጅዎ ቆዳው ቢጫ ሲሆን ምን ያደርጋሉ?	ወደ ጤና ተቋም እወስደዋለሁ ……………………..………1 የቤት ውስጥ ህከምና እሰጠዋለሁ …………………………2 ወደ ባህላዊ ህከምና ቤት እወስደዋለሁ ……….………3 ሌላ ………………………………………………4	