



Barriers and Facilitators of Community Based Service Utilization for Newborn Possible Serious Bacterial Infection Management in North Shoa, Oromia, Ethiopia

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DECLARATION

I declare that this research thesis report entitled “Exploring barriers and facilitators of community based service utilization for newborn possible serious bacterial infection management” is my own work that it hasn’t been addressed in study area as far as my knowledge touched and all resources I used has been indicated and acknowledged as complete reference. I understand that non-adherence to the principles of academic honesty and integrity, misconceptions/fabrications of any idea/data/source will constitute sufficient ground for disciplinary action by the University and also evoke penal action from the sources which have not been properly cited or acknowledged.

Name of student

Signature

Date

APPROVAL SHEET

As thesis research advisor, I hereby certify that I have read and evaluated this thesis report prepared under my guidance by Kasahun Girma entitled “Exploring barriers and facilitators of community based service utilization for newborn possible serious bacterial infection management”. I recommended that the report be submitted for implementation and further action as fulfilling the thesis requirement.

Name of major advisor	Signature	Date

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As member of the board of examiners of the MPH thesis report open defense, we certified that we have read and evaluated the thesis report prepared by Kasahun Girma and examined the candidates report. We recommend that the report be accepted for implementation and further actions as fulfilling the thesis requirements for the degree of Master of Public Health in Health Promotion and Health Behavior.

Examiner	Signature	Date

ABSTRACT

Background: Worldwide, possible serious bacterial infection causes about 600,000 neonatal deaths per year. Community based management of newborn possible serious bacterial infection when referral is not possible has been on implementation. Studies showed gaps on its service utilization but studies addressing its barriers were not accessed.

Objective: To explore barriers and facilitators of community-based service utilization for newborn possible serious bacterial infection management.

Methods: A descriptive qualitative study was conducted from March 11– April 7, 2019 in Debre Libanos District, Ethiopia. Study participants were recruited purposively from six kebeles; women's delivered within the last two months were the primary study participants. Twelve in-depth interview and three focused group discussions were conducted; data was audio-recorded, transcribed verbatim and translated, and analyzed using inductive thematic analysis on atlas ti.7.1.

Findings: This study explored facilitators like availability of HEWs trained on community-based newborn care [CBNC], health workers trained on Integrated Management of Newborn and Childhood Illness [IMNCI], medical supplies and job aids, and performance review meetings; and barriers like communities perception on newborn illnesses, belief of traditional medicine, health care seeking decision making, socio-cultural and religious beliefs, lack of awareness on service availability, lack of program ownership and sustainability, unavailability of CBNC trained health worker, weak health center and health post linkage, shortage of HEWs, residency of HEWs, closure of health posts on working hours, poor HEWs commitment and non-functionality of one to five and health developmental army [HDA] were explored.

Conclusions: This study found that community based management of newborn PSBI was discontinued due to barriers explored at different settings. This has big implication in that it might not be possible to reduce newborn death with this community-based program in this study setting. Therefore, attention should be given for the program to foster its implementation, creating demand and developing health seeking behavior of the community for newborn illnesses.

Key words: *Community Based Newborn Care, possible serious bacterial infection, Ethiopia*

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LIST OF ABBREVIATIONS

ANC- Antenatal care	IPLS- Integrated pharmaceutical and logistic supply
BCC- Behavioral change communication	LMIC- Low and middle income countries
BSC- Bachelor science	MNCH- Maternal, neonatal and child health
CBNC- Community based newborn care	MPH- Master of public health
E.C – Ethiopian calendar	NGO- Nongovernmental organization
EPI- Expanded program for immunization	NMR- Newborn mortality rate
FGD- Focused group discussions	ORS- Oral rehydration solution
FMOH- Federal Ministry of Health	PHCU- Primary health care unit
HC- Health center	PhD- Philosophical degree
HDA- Health developmental army	PNC- Post natal care
HEP- Health Extension Program	PRCM- Performance review and clinical mentoring
HEW- Health Extension Worker	PSBI- Possible serious bacterial infection
HMIS- Health management information system	PWC- Pregnant women conference
HO- Health officer	SNNPR- Southern Nation and Nationality Peoples Region
HP- Health post	UNICEF- United Nation International Child Fund
HW- Health workers	VSD- Very severe disease
ICCM –Integrated community case management of childhood illness	WHO- World Health Organization
IDI- In depth interview	WoHo- Woreda health office
IFHP- Integrated family health program	ZHD- Zonal health department
IMNCI- Integrated management of newborn and childhood illness	

CHAPTER ONE: INTRODUCTION

1.1 Background

Possible serious bacterial infection [PSBI] or very severe disease [VSD] is a holistic classification of serious bacterial infections like pneumonia, sepsis and meningitis on newborns, which is used on Integrated Management of Neonatal and Childhood illness [IMNCI] and Integrated Community Case Management of Childhood illness [ICCM] packages due to difficulty of distinguishing between these infections. It is classified when one or more of danger signs: unable able to feed or stopped feeding well, grunting, convulsions, fast breathing, severe chest in-drawing, fever, and low body temperature are seen on the newborns [1-4].

It is mostly a disease of poor countries particularly highly prevalent in sub-Saharan Africa and Southern Asia [5]. This is because these countries have conditions that are associated with quality of care around at a time of birth [5], lack of giving attention for newborns on critical first few days, presence of home delivery in settings with suboptimal hygiene and non-sterile techniques are used for cutting the umbilical cord [6]. Other factors like premature birth and lack of maternal immunization predispose neonates to infection [7]. Also due to poor preventive measures, poor timely care seeking, treatment with appropriate antibiotics or follow up [8, 9].

It is a cause of newborn deaths next to birth asphyxia and preterm or low birth weight [10-12]. Almost 98% of neonatal deaths due to this occur at low- and middle-income countries. This is because in resource-limited settings, even if the recommended treatment for PSBI is at hospital, newborns with signs of PSBI do not receive the recommended inpatient treatment due to accessibility, acceptability or affordability problems resulting unnecessary, potentially preventable infection-related newborn death [2]. Therefore, ending newborn death from treatable infectious disease is critical by expanding effective curative interventions [5].

To achieve this, world health organization recommends its community-based management where referral to hospital is not possible [2, 13]. Thus, providing effective treatment for newborns with PSBI at first-level health facilities when referral is not possible will increase access to potentially lifesaving care for newborns [2]. Ethiopia also started implementing it as a CBNC package and as one high impact newborn and child survival intervention [14]. But, by reviewing different literatures it was understood as there were gaps in utilizing this service [15, 16]. To take action for enhancing this service utilization aiming to reduce newborn deaths, exploring barriers and facilitators of service utilization is very important. Therefore,

this study was focused on qualitative exploration of potential barriers and facilitators for community based service utilization for PSBI management among newborns in Debre Libanos district, North Shoa, Oromia, Ethiopia.

1.2 Statement of the problem

Globally, 2.5-2.8 million newborns died per year which means that 7000 newborns will be lost every day with mortality rate of 37 per 1,000 live births. The largest number of newborn deaths occurred in Southern Asia (39 per cent), followed by sub-Saharan Africa (38 per cent). The first five countries that accounted for half of all newborn deaths were India, Pakistan, Nigeria, the Democratic Republic of the Congo and Ethiopia [5]. In Ethiopia 1 in every 35 children dies within the first month [10].

Possible serious bacterial infection is one neonatal health issue causing an estimated number of 600,000 neonatal deaths per year [2] which accounts for approximately 23 % of neonatal deaths, yet as high as 50% in low-income settings [8, 9]. Globally, there were an estimated number of 6.9 million cases of PSBI in newborns needing treatment; 3.5 million in south Asia, 2.6 million in sub-Saharan Africa, and 0.8 million in Latin America [5]. Its incidence ranges from 5.5 cases/1,000 live births for blood culture-confirmed infections, to 170 cases/1,000 births for clinically diagnosed cases in community-based settings [17]. It has 9.8% case fatality risk [5].

Community based study conducted in Ethiopia showed that eight percent of newborns had sign and symptoms of PSBI [15]. Study also showed that the incidence range of 6-9 per 1,000 live births among newborns admitted at ICU with prevalence of 72.2% [18]. Study conducted in Jimma zone showed that neonatal infection is a cause for 34.3% neonatal death [11]. On Health Sector Transformation Plan [HSTP], Ministry of Health has planned to reduce neonatal mortality rate from 28/1,000 live births to 11/1,000 live births. Considering this community based neonatal sepsis management was introduced as one component from CBNC package [19] and as high impact child survival interventions aiming to decrease newborn deaths attributed to it [14].

A study conducted to evaluate the effect of newborn PSBI management on NM by providing the treatment at HP when referral is not possible showed that among 57% PSBI cases identified by HEWs, 90% were refused referral and treated at the health posts. Among them, 79% have completed treatment. But, these accounts only half of all newborns expected to have PSBI. This implies half of newborns with PSBI was not address or accessed the care

[16]. Other study also showed that there were care givers who could not sought care for their newborn even if they were manifested sign and symptoms of PSBI [15].

Lack of money, distance, transportation, socio-cultural and religious beliefs, perceiving newborn sickness as being not serious or issue of perception of self-resolution, belief on households apply home therapies, traditional healers or traditional medicines were the accessed factors for health seeking behavior of the community for their sick newborns. Studies also showed gaps like shortage health extension workers at some health posts, lack of adequate supervision given to HEWs and gap on CBNC trained staff on health facilities. But, these factors/barriers were not specific to community based management of sick newborns rather they were assessed or explored as barriers for seeking care for sick newborns in general. The other thing is that some of these findings were from studies conducted at other contexts even out of Ethiopia. Therefore, since service utilization might be affected by barriers ranging from individual to institutional; cultural, economic, geographical, psychological and physiological dimensions and studies that addressed such barriers were not accessed, this study explored barriers and also facilitators for community based service utilization for newborn PSLBI management.

1.3 Significance of the study

The anticipated results from this study will be used by MOH, RHBs, ZHDs, District Health Offices, HCs and different partners that will be engaged on such programs to increase awareness and knowledge of health care providers, and community members on barriers of community based management of newborns PSBI. The study can be used as base line for discipline of health promotion, behavior and communication to prepare and develop materials that address barriers to empower the community. It can be used as a starting point to researchers who want to conduct quantitative studies. The study findings will be used by MOH to develop appropriate strategic initiatives used for better implementation and monitoring to achieve this high impact newborn and child intervention to achieve the planned target. Therefore, this study was carried out to come up with strong recommendation that will be used by North Shoa ZHD, Debre Libanos District Health Office, health service providers and implementing partners to considerin designing appropriate strategic initiatives for better implementation and scale up of community based management for newborn PSBI aiming to reduce NMR.

CHAPTER TWO: LITERATURE REVIEW

Reviewing different literatures mainly published articles, guide lines and WHO reports; here under presented community based management of newborn PSBI related pertinent issues. Accordingly, this literature review covers overview of community based management of newborn PSBI in Ethiopia, rational for community based management of newborn PSBI, utilization and promising successes achieved through community based management of newborn PSBI and community and health system relates factors affecting its utilization.

2.1. Over view of community based management of newborn PSBI in Ethiopia

In Ethiopia, community-based intervention for newborns PSBI was started between 2008 and 2013, as a trial to evaluate the impact of a regimen of intramuscular gentamicin and oral amoxicillin, a regimen similar to the new WHO recommendations, given by HEWs to newborns and young infants with signs of PSBI when referral was not possible [16]. Even though the trial was lasted from 2008-2013 and evaluating its effect on neonatal mortality reduction [16], the program was launched on March 2013 by the Government of Ethiopia. It has been implemented in collaboration with implementing partners (UNICEF, L10K, IFHP, and Save the Children) as one major component of community based newborn care package. It was implemented in phases. Phase I was implemented in March 2014 in: Amhara (East Gojam zone), Tigray (Eastern zone), Oromia (North and East Shewa zones) and Southern Nations Nationalities and Peoples' (SNNP) Region (Wolayita, Gurage and Sidama zones) [19].

The major activities conducted were regional and zonal level CBNC orientation, training of HEW and HWs, orientation of the HDA on CBNC, post training follow-up, regular supportive supervision, performance review and clinical mentoring (PRCM) meetings and procurement and distribution of essential supplies and drugs as well as operations research. By August 2014 all HEWs in PHCUs all phase I zones had completed training. Based on learning from the Phase I zones Phase II of CBNC program implementation was started on January, 2015 [19]. The CBNC program acts as a key milestone of the Ethiopian HEP building lessons learned from ICCM to implement CBNC activities [18] and it is also one of high impact newborn and child survival interventions aimed to reduce NMR from twenty eight deaths per thousand live births to eleven deaths per thousand live births by 2020 [14].

2.2. Rational of community-based management of newborn PSBI

Worldwide, approximately ten [percent] of newborns develop serious bacterial infection within the first month of life of which ninety eight [percent] occur in low and middle income countries resulting in neonatal death [1]. Its prevalence differs across different socio-economic, socio-demographic and socio-cultural status of populations. Study conducted in Saudi Arabia showed that there was incidence of early and late onset sepsis among low birth weight neonates [20]. Community based study conducted in Ethiopia also showed presence of newborns with symptoms of an illness, especially symptoms typical to PSBI. But, there were newborns that did not get care from health care provider [14]. Studies conducted at hospitals in Ethiopia showed prevalence of neonatal sepsis among neonates [16, 21].

With this high prevalence and incidence rate, in resource limited settings (i.e. LMIC) when Young infants fall ill, their families may not recognize the illness. Even when young infants are recognized as being sick, they are not taken to health facility or are taken to traditional practitioners or if brought to a primary health care facility, they are referred for hospital care. During such occasions, family's lacks access to a hospital or do not accept referral. In this case, a PHCU staff has little to offer and these infants may return home without treatment. Thus, mortality in newborns and young infants remains distressingly high [2, 16, 22]. So, considering these, to address those newborns, when referral is not possible, WHO recommends its community based management and also becomes beneficial [2].

2.3. Utilization and promising successes achieved through community based management of newborns with PSBI

Different studies conducted in resource limited settings indicates that community based newborn care interventions like management of PSBI by community health workers is associated with reduced neonatal mortality. Study conducted in India showed that significant decline in mortality in neonates, and infants were achieved through effective CBNC, especially home visit, primarily to management of neonatal sepsis at community level [9]. In Ethiopia also currently Health Extension Workers (HEWs), in general, are properly providing antibiotic treatment of PSLBI to newborns at the HP level when referral is impossible. Among newborns visiting health post, fifty seven [percent] were identified by HEWs as having at least one PSBI sign, ninety [percent] refused referral and treated at the HPs. Among these, more that seventy nine [percent] of them completed the antibiotic regimen and with only two [percent] case fatality rates. But, only about half of newborns estimated to have infections have received treatment by HEWs [16].

2.4. Factors affecting community based management of newborn PSBI

Even though community based management of newborn PSLBI has the above mentioned benefits towards reducing newborn mortality, reviewing different literature it is understood that there is a gap in utilizing the service. This service utilization or community's/care givers health seeking behavior towards utilizing the service might be affected by different barriers ranging from individual to institutional; cultural, economic, geographical, psychological and physiological dimensions. By reviewing different published articles, the following factors were mentioned that affect health seeking behavior of the community for sick newborns at different settings/contexts.

Studies showed that health seeking behavior of community members for sick newborns were affected by different socio-economic related barriers like lack of money, distance from health facility; transportation problems [23, 24], socio-cultural and religious beliefs [12, 14], perceiving newborn sickness as being not serious or issue of perception of self-resolution [24-26], belief on households apply home therapies, traditional healers or traditional medicines [23, 24, 27-19]. Study conducted in Ethiopia showed the identified gaps at health facility level on CBNC implementing settings. The majorly mentioned gaps were shortage health extension workers at some health posts, lack of adequate integrated supportive supervision given to HEWs, and gap on CBNC trained staff [19].

Finally, from the above literatures prevalence of newborn PSBI, potential barriers that might affect community based service utilization for sick newborns have been understood from both community/care givers and health facility sides. However, factors/barriers mentioned above were not specific to community based management of sick newborns rather they were assessed or explored as barriers for seeking care for sick newborns in general. The other thing is that some of findings mentioned above in this section were from studies conducted at different contexts, even out of Ethiopia. Therefore, since service utilization might be affected by barriers ranging from individual to institutional; cultural, economic, geographical, psychological and physiological dimensions and studies that addressed such barriers were not accessed, this study explored in depth barriers and also facilitators for community based service utilization for newborn PSLBI management.

CHAPTER THREE: RESEARCH QUESTIONS

1. Why community members do not utilize community-based service for newborns with PSBI?
2. How do community members perceive newborn illness?

CHAPTER FOUR: METHODS AND MATERIALS

2.1. Study setting and period

This study was conducted in Debre Libanos District, North Shoa, Oromia, Ethiopia from March 11– April 7, 2019. It is located 90 km away from Addis Ababa in North direction. It is named after the important monastery of Debre Libanos. The administrative center is Debre Tsige. The area is bordered on the North West by Gerar Jarso, on the South West by Yaya Gulele, on the South and South East by Wuchale and on the North East by Amhara Region. Currently, there are an estimated number of 64, 305 populations with 2225 expected number of live births per year who are eligible to community based newborn care. 77.1% and 22.9% of the population lives in rural and urban, respectively [30]. 99.29 % of the inhabitants practiced Ethiopian Orthodox Christianity [31]. Currently, there are two health centers, ten functional health posts [two urban and eight rural], one nonfunctional health post [with no HEW] and three private primary clinics. Also, there are four Health officers, one BSC nurse, twenty clinical nurses, one public nurse, four laboratory technicians, two druggists, five midwifery nurses, fourteen rural HEWs, and five urban HEWs who provide service for these populations. There are two HPs which have only one HEW [30]. This study setting was selected taking into considerations the research questions [i.e. no accessed studies done on this setting on the issue], population distribution and diversity, time to complete the study, resources at hand, and familiarity with the study setting. This setting is the second from the least in achieving community based management of newborn PSBI from North Shoa zone districts [32].

2.2. Study approach

This study is a descriptive qualitative study which was conducted to explore barriers and facilitators for community-based service utilization for newborn PSBI management. It was chosen because it is an important and appropriate design for research questions focusing on discovering who, what, and where of events or experiences happened and gaining insights from informants regarding a poorly understood phenomenon [33]. It was also preferred due to its less time and resource consuming. Purposive sampling technique was used to recruit study participants. Data collection involved primary sources of data collected through semi-structured in-depth interview and focus groups discussion. Data analysis involved inductive thematic analyses. Therefore, due to this nature of this study approach, this study was conducted to address barriers and facilitators of community-based service utilization for

newborn PSBI management because no studies were accessed that addressed its barriers and facilitators.

2.3. Study participants

The study participants were women who gave birth in the last two months recruited purposively from women who gave birth in the last two months prior to data collection. It also included health center U-5 clinics focal, MNCH focal [midwife nurse], head of health center, district health office MNCH expert, and HEW from health workers, and kebele chairman, religious leader, women who gave birth in the last three years prior to data collection; husbands, fathers and mothers of women delivered in the last two month; pregnant mothers, mother in law, mother who lost her newborn during the first two month of life prior to data collection, father in law, other reproductive age group married and males and females and married females were recruited from the general population.

2.4. Participant recruitment

A purposive sampling technique was used to recruit participants from six kebeles and also from health facilities. From District Health Office; one MNCH expert was recruited as key informants for IDI. From HCs; one head, one under five clinics and one MNCH [i.e. midwife nurse] focal were recruited as a total of three key informants. In consultation with head of both HCs; six HPs were selected; two from one HC and four from the other HC considering number of catchment HPs per HC, diversity in distance from HC, rural versus urban residence, and performance of HEWs. From these kebeles, three kebeles were taken to recruit participants for IDIs and three kebeles for FGDs. From selected kebeles, one HEW, four women who gave birth in the last two month prior to data collection, one woman whose newborn was died within the first two month of life and one kebele chairman was purposively recruited in consultation with HEWs as a total of seven key informants. And also one religious leader was recruited as key informant.

In consultation with HEWs and Kebele chairman, 10-12 participants were purposively recruited for each FGD. But, 7-12 individuals were participated on each FGD; with a total of twenty eight participants. The participants recruited and involved on each FGDs were women who gave birth within the last two years; women whose newborn was sicken and treated at HC within the last 2-3 years, fathers whose newborn was sicken and treated at HC the last 2-3 years; husbands, fathers and mothers of women delivered within the last two month prior to data collection; pregnant mothers, mother in laws, mother who lost her newborn during the first two month of life, father in laws, other reproductive age group married males and

females and other unmarried males. Participants from health facilities were recruited based on their role on implementation of the program activities [i.e. as monitor or direct implementer]. The participants from kebele level study participants were recruited based on having rich information on newborn illnesses or their role as a care giver on newborns.

2.5. Data collection procedures (instrument, personnel, data collection)

A total of twelve IDIs and three FGDs were conducted with a total of forty participants, 12 on IDIs and 28 on FGDs, comprising diversified group of individuals from different settings using a semi-structured guide. The guide was prepared to cover topics related to a) communities experience on newborn illnesses [communities' perception on newborn illness, their causes, symptoms and management, when to decide newborn illness to seek care]; b) Community related barriers and facilitators (cultural and religious beliefs, awareness about service availability, etc.) c) Health facility related barriers and facilitators [supportive supervisions given to HEWs, medical supplies and job aids, activities done to empower the community to enhance service utilization]; d) health extension related barriers and facilitators [residence, commitment, etc.]

The guiding questions were developed in English language in relation to the research questions while taking into account local knowledge and cultural sensitivities. The sequence of the topics generally moved from the more general to the specific questions. Guides were then translated into Afan Oromo and Amharic languages depending on participants, back-translated in to English language by an independent translator.

At the beginning of the each FGD and IDI, the moderator has explained the purpose of the study and topic of the discussions. Written informed consent was taken and also consent was obtained to record their voice. The moderator was used topic guide to direct the interview and discussion aiming to cover all relevant topics.

The FGDs were conducted within HP compound and the IDI at participant's home for delivered mothers and for religious leader; HC for HEW, U-5 focal, MNCH focal, HC head and District store man and also at District Health Office for District MNCH expert. The IDIs were conducted one to one in between the researcher and participant, but the FGDs were conducted by the researcher as a moderator and assistant as a note taker and audio-recorder. The FGDs were conducted for a time ranging from 1:15 to 1:41 hour and the IDIs with community members ranges from 21:33 to 43:51 minute and IDI with health facility staffs ranges from 0:39:40 to 1:12 hour. The lowest interview was conducted with a woman who gave birth for three times and age of 36 years old. This woman was energetic enough to

respond well to the raised main and probing questions as per the research questions of this study within these minutes. Therefore, the interview conducted within this time hopefully did not affect exploration of ideas from this participant.

2.6. Term and contextual definitions

Barriers of community-based management of newborn PSBI: In the context of this study barrier includes any conditions that affected community-based management of newborn PSBI with respect to the community, health system, health facility, health care providers and one to five and health developmental armies.

Facilitators of community-based management of newborn PSBI: In the context of this study facilitator is any conditions that make the community to utilize the service by enforcing or sensitizing them, create favorable condition to them for utilizing the service; availability of trained health staff that can provide the service, monitor service delivery, etc.

Community Based Newborn Care job aids: IMNCI, CBNC/ICCM registration books, Chart booklet, Family health card, pregnant women and outcome registration book, PNC register, Stock card/bin card, vaccination cards, request and re-supply forms, HMIS forms, Supervision checklist, ANC register.

CBNC medical supplies: Amoxicillin, gentamycin, infant weighting scale, thermometer, timer or clock, TTC eye ointment, chloroheixidine, paracetamol, syringes, gloves, alcohols, swaps, safety box.

Community based management: Is management that can be delivered by a community health worker and HEWs in close proximity to one's home, including services delivered at home, health facilities or to the family and through outreach sessions [11, 18].

Community based newborn care: Is comprehensive care aiming to reduce newborn mortality rate through early identification of pregnancy, provision of focused antenatal care, promotion of institutional delivery, safe and clean delivery, provision of immediate newborn care, including application of chlorhexidine on the cord, recognition of asphyxia, initial stimulation and resuscitation of the newborn baby, prevention and management of hypothermia, management of pre-term and low birth weight neonates, management of neonatal sepsis and very severe disease (VSD) at community level [11, 18].

Community case management: CCM is defined for this study as management, including assessment, classification, and treatment of childhood illnesses and counseling of caretakers,

carried out by a paraprofessional health worker at the community level (including at health posts in communities) [34].

Facility infrastructure: Infrastructure that is available at health facilities which are used by clients at a time of or facilitating service utilization. These include functional HP, facility toilet, drinking water source, electricity, cell phone, HEWs residency, and sterilize [18].

Functional health post: A functional health post is defined as a presence of physical health post structure where at least one HEW is currently assigned to provide services to the community [34].

Functional one to five and HDA: is defined as presence of one to five and health developmental army that has members who regularly meet together to discuss MNCH issues, conduct post-natal care to teach care givers about maternal and newborn danger signs, identify danger signs on both the mother and newborn, and refer to HEWs or other health facilities for getting service.

Health center: Is the primary entry point to Ethiopian health delivery system tier in urban community which is established as PHCU for providing health service for about 15000-25000 populations [35].

Health center-health post linkage: In a linkage between one health center and five health posts within PHCU to support, monitor and evaluate HEWs for empowering them for promoting health of the community, preventing diseases, and to facilitate availability of basic health care services for the community through playing a role in development of health developmental army and in decreasing medical supply and job aids.

Health extension program: Ethiopia's flagship which serves as a platform for delivery of community based basic promotive, preventive and curative health services with at two HEWs serving to an average of 5,000 populations [35].

Health post: Is the primary point of entry to the Ethiopian health system delivery tier in rural community which is established as PHCU at kebele level for providing health service for about 5000 populations [35].

HMIS forms: Forms for routine data collection on facility provided services [18].

Integrated community case management: ICCM in this context is defined as integrated community case management carried out by a paraprofessional health worker at the community level of all of the following childhood illnesses: pneumonia, diarrhea, malaria, and malnutrition [34].

Integrated supportive supervision: Is the periodic assessment of all the activities for which a particular facility is responsible [36].

Kebele: Is the lowest level unit of administration in Ethiopian government which consists of 3000-5000 catchment populations [35].

Management: Refers to assessment, classification, and treatment of newborn illnesses and counseling of caretakers, carried out by a paraprofessional health worker (community health workers, including HEWs) at the community level [34].

Newborn possible serious bacterial infection (Very severe disease): Newborns classified as having any one or more of the following signs: not able to feed since birth or stopped feeding well, convulsions, fast breathing (60 breaths per minute or more), severe chest in-drawing, fever (37.5 °C or greater) or low body temperature (less than 35.5 °C) [2, 3].

Newborn: Includes all neonates with age range of 0-2 months [2, 3, 11, 17].

Program-Specific Supportive Supervision: Is supervision given to specific programs carried out [37].

Quality post natal care: Providing post natal care by checking newborn danger signs and assessing for any health condition and providing appropriate care as per the chart booklet.

Request and re-supply forms: forms used for replenishing drugs [18].

District Health Office: Is health office established for co-coordinating and organizing health service provision among primary care units in the District.

District: Is the second most important local government structure next to kebele, acting as the basis for most administration and management in Ethiopian government which consists of 100,000 populations.

Zone: Is the third administrative hierarchy next to the woreda and directly accountable to the region [35].

2.7. Data analysis

Inductive thematic analysis, through which codes, sub-categories, categories and themes were developed from the data, was employed to analyze the data. The analysis was started with listening of the audio. Verbatim transcription was done by the researcher in support of research assistant. Field notes were incorporated within the transcription simultaneously. Then, the transcriptions were checked for completeness and consistency. After ensuring the completeness and consistency, all FGD transcripts and transcripts of IDI conducted with District Health Office MNCH expert, religious leader, HEW and health workers were translated by the researcher. Transcripts of IDIs conducted with kebele chairman, delivered mothers and woman whose newborn was died within the first to month of life were translated by the research assistant. Completeness and consistency of the translations were checked with the transcriptions.

Reading and re-reading of the translations were done to extract important statement from the description and then coded line by line. First, the researcher and one other assistant were conducted line by line; the researcher on ATLAS.Ti.7.1 and the assistant manually on Microsoft word starting from richest data. Then, the given codes were checked for inter-coder consistency and code book manual was developed. Peer debriefings were conducted with these both assistants, one during data collection, transcription and translation; the other during coding system.

Then, the researcher coded the whole translations using the code book manual to ensure code consistency and credibility. Again, the researcher coded the whole translations for checking intra-coder consistency [reliability]. Potential sub-categories were developed by clustering codes and also categories and themes were developed by clustering sub-categories and categories, respectively which answer the research questions. The researcher repeated the coding system four times after the first code book was developed while refining the code book, sub-categories, categories and themes. Finally, results were presented with major theme, categories, sub-categories and quotations derived from the data in relation to critical steps in the pathway: (a) community related barriers and facilitators (b) health system related barriers and facilitators (c) health extension worker related barriers and facilitators.

2.8. Trustworthiness (rigor)

To keep worthiness of the study; to determine how closely study findings reflect and represent the data provided and experienced by participants in relation to the study processes and procedures, the following trustworthiness principles were followed [38].

2.8.1. Credibility

Credibility of this study, how accurately a study's findings are reported in study outputs and whether they can be seen to be congruent with what participants have said in the reporting of responses to study questions, was ensured through peer debriefing, triangulation, member checking, prolonged engagement, creating rapport and negative case analysis.

Peer-debriefing: Two research assistants were involved on this study. The first research assistant involved during data collection, transcription and translation. He was recruited taking into account his experience in note taking during qualitative research data collection, knowledge of local language and health background as a criterion. Half day orientation was done on the general research process and on his responsibility as well. Then, two IDIs were conducted with recently delivered mothers while pre-testing the IDI guide; one with delivered mother and one with health extension worker. The second assistant is the researcher colleague who is MPH student. He was involved on first round coding.

Member checking: At the end of each IDI and FGD, participants were summarized major themes raised and the researcher also discussed on those and some unclear ideas at the end. The transcription and translation were shared and summary of core points and some confusing ideas were presented to HEW, U-5 clinic focal, head of health center and district health office MNCH focal to check the interpretations. Then, they provided their comments and critiques on the raised points and agreement was done on some doubt ideas. The findings of the study also shared to these participants through phone calling for checking each quotations mentioned by them as they were it was their response or for verifying as they were responded to imply like this or not and all of them were agreed on it.

Triangulation: Method triangulation [IDI and FGD] and data triangulation [data taken from different source of population] was used.

Prolonged engagement: The researcher spends more time while interviewing and on day to day interaction with study participants from health facilities, understood and observed various aspects like closure of HPs on working hours, as HEWs live and work travelling from town, HEWs not arrive or spend all working hours at HP, no pregnant women conference, no HW went to supervise HEWs, etc. which all ensure or verify the findings. The researcher also

reviewed the 0-2 month sick newborn registration book at six health post and verified as no newborns were assessed, classified and managed for the last two to three years [i.e. discontinued].

Creating rapport: The researcher discussed the importance of the research with zonal health department staffs, district health office staffs, health center staffs and study participants [i.e. spoken with a range of people] and developed relationship, trust and rapport with them. Zonal health department manager and district health office wrote support letter for the researcher and the study participants were recruited together with them. They also supported the researcher in facilitating transportation to go kebeles to conduct IDI and FGDs. They also discussed the progress of data collection directly and through phone.

Negative case analysis: The researcher tried to analyze contradicting ideas or deviant cases that emerge in the data by enquiring in-depth from potential study participants on the consecutive data collection periods.

2.8.2. Transferability

To ensure transferability, applicability of one set of findings to another setting or the extent to which the reader is able to generalize the findings of a study to her or his own context, the whole research process, participant's diverse perspectives and experiences, methodology, interpretation of results, and contributions of research assistants were explained clearly through thick description.

2.8.3. Dependability

In order to ensure dependability, whether a study's findings achieved, and the working methods will be repeated by another researcher conducting similar study, the chosen methodology, selection and recruitment of participants, data collection methods and the analysis process were thickly described. Detailed chronology of research activities and processes, data collection and analysis, emerging themes, categories or quotations were audited by advisors, colleagues and examined by other person who has MPH in health education and promotion and has experience on conducting qualitative research to confirm the procedures and verify whether they were used correctly to make both the process and the study output consistent. Thus, with these activities, the process through which findings derived was made explicit enough.

2.8.4. Confirmability

Confirmability of this study, whether study's findings clearly represent participants' view than the belief, theories or biases of the researcher, was ensured through different techniques.

Researcher self-reflectivity and bracketing: The researcher is public health officer in his back ground that has experience in working at health center with different departments like u-5 clinics, ART clinics, MNCH clinics, etc. the researcher also had taken different trainings related to Community Based Newborn Care, including management of newborn possible serious bacterial infection, worked as CBNC focal and participated on different supportive supervisions and PRCMM meetings. The researcher also has experience on conducting IDIs and FGDs. This preconception knowledge and skills benefited the researcher to set and focus on research questions. The research advisors involved on this study also has health background and with educational status of PhD aand MPH and have experience of conducting qualitative researches.

The context of this study setting differs from the setting at which the researcher had been worked on and the participants were also not familiar with the researcher. Therefore, even if bias is inevitable or unavoidable at any studies, the researcher experience does not lead to a bias that affects the study findings. As much as possible, subjectivity of the researcher on this study was managed by balancing together the data, analytic processes, and findings in such a way that the reader is able to confirm the adequacy of the findings. Also the researcher and assistant know the local language well but the research assistant knows the culture of the community more than the researcher. This background used to minimize interpretation bias. But, inorder not to be overconfident while interpreting the findings, attention was also taken to balance interpretation of the findings with direct quotations taken from study participants. The advisors also supported the researcher during the whole process of the research, for example, during data collection time to include diversified group of participants, monitored the data analysis, and also checked the interpretation of the findings.

Audit trial: The findings of this study were audited and verified by advisors, colleagues and other person who has experience on qualitative research. The findings were also verified by key informants like HEW, kebele chairman, and health workers participated on the study. And each process was documented and audio records were available for cross-checking.

2.9. Ethical considerations

Ethical approval was obtained from the Jimma University Research Ethical Review Board, Ethiopia. Support letters were also taken from North Shoa ZHD and District Health Office. The right of research participants was maintained by ensuring no-harm and underscoring the benefits of the study. Study participants were informed adequately about the purpose of the study, voluntary participation and right to participate or withdraw at any time. In order to

ensure their privacy and autonomy, code was given to participants and informed as the study uses this code in place of their names in connection to the study findings or in their answers on discussions or interviews. Time was given to them to reflect and provide detail explanation of the issue. Individual based written consent was taken and participants were also informed for audio-recording and the consent taken was also included it.

2.10. Dissemination of results

The results of this study will be disseminated by hard and soft copy to Jimma university department of health, behavior and society, North Shoa ZHD, District Health Office, health centers and stakeholders. The finding will be presented in conferences or seminars to different stake holders and concerned bodies and will be tried to publish in scientific journal.

CHAPTER FIVE: FINDINGS

5.1. Participant’s socio-demographics

Demographic characteristics of participants are summarized in Table 1 and 2. Mean age was 37.6 years (range: 21-73 years)

Table 1: Demographic characteristic of participants involved on IDI in Debre Libanos District, North Shoa, Oromia, Ethiopia, 2019

Characteristic	Category	N	Characteristic	Category	N
Age	20-30	3	No of children	1	3
	31-40	8		2	1
	41-50	1		3	2
Sex	Male	5		4	2
	Female	7	Occupation	House wife	3
Marital status	Single	3		Merchant	2
	Married	9		HEW	1
Education status	Illiterate	1		Health worker	4
	Primary	2		Kebele chairman	1
	Secondary	2	Priest	1	
	Diploma	6	Residence	Urban	8
Degree	1	Rural		4	
Ethnicity	Oromo	12	Religion	Orthodox	12

Table 2: Demographic characteristic of participants involved on FGD in Debre Libanos District, North Shoa, Oromia, Ethiopia, 2019

Characteristic	Category	N	Characteristic	Category	N
Age	20-30	6	No of children	1	3
	31-40	11		2	3
	41-50	6		3	6
	51-60	3		4	4
	61-70	1		5	4
	>=71	1		6	2
Sex	Male	11		7	2
	Female	17	Religion	Orthodox	28
Marital status	Single	1	Occupation	House wife	18
	Married	26		Farmers	10
	Widowed	1	Ethnicity	Oromo	28
Education status	Illiterate	24	Residence	Rural	28
	Primary	2			
	Secondary	2			

The findings of this study are summarized in the table below based on three major themes, fifteen categories, and eight sub-categories which are:-.

Table 3: Major themes, categories and sub-categories of the study finding conducted at Debre Libanos district, North Shoa, Oromia, Ethiopia, 2019

Major themes	Categories and sub-categories
Community related barriers and facilitators	<ul style="list-style-type: none"> ♣ Communities perception on newborn illnesses, <ul style="list-style-type: none"> i. Perception of no treatment ii. Perception on non-severity and self-resolution ♣ Belief on traditional medicines ♣ Health care seeking decision making ♣ Socio-cultural and religious belief <ul style="list-style-type: none"> i. Religious belief ii. Cultural belief-hamechisa

	<ul style="list-style-type: none"> iii. Fear of evil spirit ♣ Awareness on availability of sick newborn treatment service at HP
Health system related barriers and facilitators	<ul style="list-style-type: none"> ♣ Program ownership and sustainability ♣ Strength of health center and health post linkage <ul style="list-style-type: none"> i. Availability of performance review meetings ii. No use of data for decision making iii. No regular supportive supervision ♣ Medical supply and job aids ♣ Equipped human resource ♣ Shortage of HEWs ♣ Budget problem ♣ Functionality of one to five and health developmental army
HEWs related barriers and facilitators	<ul style="list-style-type: none"> ♣ Residence of health extension workers, ♣ Closure of HPs on opening hours, ♣ HEWs commitment to provide service

Furthermore, the detail description of each category and the relationship between these categories is described as follows.

5.2. Community related barriers and facilitators

This theme contains description of barriers and facilitators which belong to the community and care givers that affect community based service utilization for newborn PSBI management. It has five categories: communities' perception on newborn illness, belief on traditional medicines to treat newborn illness, decision time to seek health care, lack of awareness about the availability of sick newborn treatment at health post, and socio-cultural and religious belief.

There is inter-relationship between categories. For example, community's perception on newborn illnesses, use of traditional medicines and health care seeking decision making have interaction in that community members locally diagnose newborn illnesses, from those illnesses they have their own perception as no treatment is available at health facilities, preception of non-severity and self-resolution; time to decide seeking care and they use traditional medications to treat sick newborns.

5.2.1. Communities' perception on newborn illness

In the context of this study communities perception on newborn illness implies the way they perceive the treatment options for locally diagnose newborn illnesses and their perception on the severity of newborn illness. These are described below under two sub-categories, perception of no treatment and perception of non-severity and self-resolution, that become a barrier for community based service utilization.

5.2.1.1. Perception of no treatment

This sub-category contains description on how locally diagnosing newborn illness affected community based service utilization from participant's point of view. Community members in this study setting diagnose and give local names for newborn illnesses when manifested with certain unspecified symptoms [table 4]. For some of diagnosed illnesses they perceive that no treatment is needed at all, unless it becomes severe or not treated at all at health facilities. For example, for newborn illnesses locally named as 'Kichit', 'megagna' and 'buda' they perceive as it is not possible to treat it at health facilities [described more on table 4 and on belief on traditional medicine section below].

"...for kichitat there is no medication [at health facilities] rather we take them to traditional healers [wogesha] and massaged. (22 years old, female, IDI participant, delivered mother)

Participants also mentioned that care is sought from health facilities if the newborn becomes not improved with traditional medicines or if they do not perceived the illnesses as they were diagnosed.

" ... When they [newborns] become unable to open their eyes or suspected as a person possessing buda has been eaten them, different traditional medications would be provided for them...After that if it does not make them to improve, they [community members] take them to governmental health facilities like health center considering as it is not buda." (42 years old, male, IDI participant, religious leader)

Study participants also mentioned that for illnesses named locally as 'megagna', they do not provide any medication before baptism. This is because, for example, participants mentioned that community members use holy water even if others use other traditional medicines [table 4] for treating megagna, but since these newborns do not reached their age of 'kristina'

[baptism] and it is not allowed to use holy water to treat sick newborns before their date of baptism, they do not provide it for them until that day.

“...there is nothing done until they reach their 40 days [males newborn] or 80 days [female newborn]...” (42 years old, male, IDI participant, religious leader)

Participants also mentioned that community members do not use any type of medications to treat a locally diagnosed newborn illness called ‘berd’ before date of epiphany. [Table4].

“We think that just when he is exposed from hot to cold, he would be touched by berd...During this time, we say that berd has touched him and we cover them with clothes to warm them... We do not provide them anything than breast feeding until their baptism day.”(54 years old, female, FGD participant, community member)

For more information on locally diagnosed newborn illnesses, their causes, symptoms and treatment options is described well in table 4 below.

5.2.1.2.Perception of non-severity and self-resolution

Perception of non-severity and self-resolution in this context implies that consideration of newborn illness as simple one which improves spontaneously by itself with in few days. Therefore, participants mentioned that community members perceive newborn illnesses as a simple one that resolve spontaneously by itself within the next few days. Therefore, they sought care for their sick newborn when they do not become improved or if it becomes severe.

“In our culture, there is a habit of simplifying things when newborns become sick. This is our habit. But, newborns less than two months would be sickened on the first one or two weeks...” (32 years old, female, FGD participant)

5.2.2. Belief on traditional medicines

Belief on traditional medicine in the context of this study implies the use of or relying on traditional medicines to treat newborn illnesses. This has description of treatment options used by community members to treat newborn illnesses and how belief on traditional medications affect community based service utilization for sick newborn management. Thus, community members in this study setting mainly use traditional medicines for treating their sick newborns. Participants also mentioned community members use traditional medicines until sick newborns are taken to health facilities or newborns are taken to health facility when they do not improved by traditional medicines.

“... If newborns cry, we suspect kichit and take him to wogesha [traditional bone setter]. Then, if the wogesha sees him but said as it is not kichit rather it is mitch, they would return home and provide medication for mitch...But, if he is not improved with that of wogesha or medication of mitch, finally we would take them to health facility...” (51 years old, female, FGD participant, community member)

“...for gunfan, by boiling milk and adding zinjibil [ginger] and kinadab, I gave to her [newborn] little by little. Then, little by little she becomes well. For kichitat, I called wogesha [traditional bone sette] to home and then, she becomes well by them. I thought to take her to health facility, but when she becomes well, I left.” (28 years old, female, IDI participant, delivered mother)

The summery of local newborn illnesses, their causes, manifestations and treatment options are described in following table 4.

Table 4: Summery of local names of newborn illnesses, their perceived causes, symptoms and mode of management in Debre Libanos District, North Shoa, Oromia, Ethiopia, 2019.

local name of newborn illness	Description *	Symptoms	Treatment options
<i>MITCH</i>	Resulted from exposure to day time sun light, <i>qeter</i> [from 4-11 o clock] or wearing of cloth stayed on sunlight immediately or contact with mothers body immediately after she stayed around	Any one or combination of symptoms like fever, unable to breast feed, vomiting, cough, irritability, weakness, unable to open eye, skin rash,	Treated using traditional medications prepared from leaf of local herbs like <i>demakesse</i> ¹ , <i>bahar zaf</i> ² , <i>kebericho</i> ³ , <i>tunjit</i> ⁴ . ‘ <i>Demakesse</i> ’ is applied on externally body, make him/her to drink punching and diluting with water or steam him/her boiling with water or smoking on fire. Additionally, others like ‘ <i>bahar zaf</i> ’, ‘ <i>kebericho</i> ’ and ‘ <i>tunjit</i> ’ are steamed to the body of the newborn by

¹ Its botanic name is *Ocimum lamiifolium*.

² Its botanic name is *Eucalyptus globulus*.

³ Its botanic name is *Echinops kebericho*.

⁴ Its botanic name is *Otostegia fruticosa*.

	the fire or on sunlight.	diarrhea, crying, difficulty [fast] of breathing	slightly smoking on fire or boiling with water. If not improved taken to health facility.
<i>KICHITAT</i> [in Amharic]; <i>Warraaqii</i> [in afan Oromo] [dislocation or fracture]	Newborn illness to mean dislocation or fracture from poor newborn handling. During this time they perceive as their lungs, hearts, and intestine would dislocate or their neck or shoulder might be fractured.	Any one or combination of symptoms like irritability, crying, vomiting, unable to breast feed, grunting, change of diarrhea to greenish [normally yellow], fast breathing, fever, and cough.	Traditional bone setter [<i>wogsha</i>] massages body of the newborn using butter. If they do not improved, other like medications for <i>Mitch</i> will be provided to them or taken to health facility.
<i>BERD</i>	Illness resulted from exposure to cold air/weather	Cough plus with any of symptoms like fast breathing, crying, unable to breast feed, irritability, grunting, chest in drawing, abdominal cramp [to mean diarrhea]	Covering with cloth and breast feeding are what is done for them. There is nothing done for them until the day of ' <i>Kristina</i> ' [baptism]. If not improved, taken to health facility.

<i>Enlargement or dropping of uvula or tonsil [tonsillitis]</i>	Newborn illness resulted from dropping of the brain [moves down]. Newborns might have sore throat as a result of excessive crying.	Any one or combination of symptoms like unable to or difficulty of breast feeding, vomiting, fever, weakness, crying	Treat traditionally by sucking their back of the neck or putting medications on their head perceiving the dropped brain returns back to its normal site. Also might be taken to health facility.
<i>MEGAGNA</i>	Newborn illness which happen when the devil touches them.	Crying suddenly, paralyzing legs or hands and others symptoms of evil eye sickness.	Treated using traditional medications like smoking <i>tunjit</i> . For protection, newborns not left alone, and metals/sharp things are putted besides them on their sleeping bed.
<i>BUDA [EVIL EYE]</i>	Result from exposure to a person possessing evil eye.	Any one or combination of symptoms: unable to breast feed, unable to open eyes, sudden crying, irritable, weakness, loss of consciousness, sleeping for long time	Treated using traditional medications prepared from <i>xenadam</i> ⁵ , <i>white onion</i> ⁶ , <i>root of grawa</i> ⁷ , <i>shiferaw</i> . Provided in the form of putting around the nose to smell it, steamed by smoking on fire or dilute the medications and make them to drink little by little.

⁵ Its botanic name is *Ruta chalepensis*.

⁶ Its botanic name is *Allium sativum*.

⁷ Its botanic name is *Withania somnifera*.

		[lethargic], difficulty of breathing	
<i>Qufa/gunfan</i> [Common cold]	Newborn sicknesses which are happening from poor hygienic condition of the newborn cloths, sleeping area, maternal hygienic condition or might be transferred from care giver if they have common cold.	Cough plus any of combination of symptoms like fever, unable to breast feed, fast breathing, wheezing, unable to open eye, grunting	Treat it using home based remedies prepared from <i>zingibil</i> [<i>ginger</i> ⁸] and <i>xenadam</i> added in to boiled milk, and also by breast feeding. If not improved taken to health facility

*From this table it is possible to understand that community members diagnose almost all newborn illnesses from non-infectious causes.

5.2.3. Health care seeking decision making

Health care seeking in the context of this study refers the time at which community members decide newborn illnesses to seek health care. Community members seek care from health facility when the newborn becomes severely sick and at a time when or after they manifested symptoms like unable to breast feed, high-grade fever, grunting, body weakness, and difficulty [fast] of breathing, frequent vomiting, gasping and change in the skin color to bluish. Participants also mentioned as they do not seek care if newborns did not manifest such symptoms or seek if the condition persists for a days. Community members delay seeking care for sick newborns due to lack of awareness about newborn danger signs, perceiving illnesses on newborns as simple that resolve spontaneously [self-resolution] or if not improved after traditional medication is provided.

⁸ Its botanic name is *Zingiber officinale*

“...fever and unable to breast feed are the symptoms indicating as newborns would be sick...If they do not have fever or problem of breast feeding, they would not be taken to health facility or not searched traditional medications for them...” (42 years old, male, IDI participant, religious leader)

“...people take them [newborns] when they become severely sick and become weak. This means that after trying all their best but not improved, for example, when he becomes unable to breast feed they take to health facility...” (58 years old, male, FGD participant, father in law)

Due to this delay in health care seeking and from perceived severity of the illnesses, participants mentioned as these stage of newborn illnesses are not treated by health extension workers. They mentioned that due to severity of the illnesses, HEWs could not able to treat such kind of newborn illnesses rather they refer to health centers or hospital.

“...we think that they [HEWs] can only treat mild illness but not severe illnesses.”(22 years old, female, IDI participant, delivered mother)

“..When they [community member] think as their newborn becomes sicken severely, health extension worker would see immediately or when it was above her capacity, she told as to take the newborn to health center.” (73 years old, male, FGD participant, community member)

U-5 clinic focal also mentioned that community members visit health center for seeking care for their sick newborns when they have conditions like weakness/lethargy, fast breathing, severe cough, unable to breast feed, high grade fever, etc.

“...they are weak, lethargic or they [community members] did not take them immediately when they become sick... they have fast breathing...their temperature becomes increasing...there are who unable to breast feed.” (32 years old, male IDI participant, U-5 clinic focal))

5.2.4. Socio-cultural and religious beliefs

Socio-cultural and religious belief in this study implies barrier that affect service utilization for sick newborns from cultural and religious aspect community members. It has three sub-categories; religious belief, cultural belief-hamechisa and fear of evil spirit, which describes the existing cultural and religious belief among this study setting community members which affects service utilization.

5.2.4.1. Religious belief

This sub-category describes religious belief mentioned by study participants that exist in this study setting and how they affect service utilization. The religious belief is practiced among Orthodox Christian followers in that community members that follow this religion consider newborns who do not reach their date of ‘*Kristina*’ [baptism] as a ‘*blood*’ to mean ‘*non-strengthened*’ which is difficult to take them out of home. Therefore, in this community member it is forbidden to take newborns out of home before their 40th day [male newborn] or 80th day [female newborn] for seeking care or other purposes.

“The belief is that they [newborns] are considered as blood and how they are taken to health facility before date of baptism.” (36 years old, male FGD participant, community member)

*“...I couldn’t go because it is forbidden to take newborn outside before her *Kristina* [baptism] day... whether there is a problem or not ...” (22 years old, female, IDI participant, delivered mother)*

Even if participants mentioned it is forbidden to take newborns to health facility before day of ‘*Kristina*’ [baptism] among these religion followers, they also mentioned that there is no religious taught said like this or is a belief inherited from their ancestors.

“Here, there is no religious taught that is said sick newborns should not be taken to health facility before their 40 days, 80 days or two months...It is a wrong taught...” (42 years old, male, IDI participant, religious leader)

5.2.4.2. Cultural belief- ‘hamechisa’

‘*Hamechissa*’ [afan Oromo language] is cultural belief mentioned by study participants in that community members who follow this type of culture do not take their newborns for PNC, seeking care or even for ‘*Kristina*’ [baptism-Christianization], before they are taken to ‘*wuqabi bet*’ and the ‘*witch*’ blessed them.

*“...At some kebeles, even to take for epiphany, there is something called “*haammuu*”. At those kebeles, newborns even do not take vaccine or not celebrate their *Kristina* [baptism] day before going to “*hammechissa*” and the witch blessed them...” (30 years old, male, IDI participant, head of HC and woreda store man)*

5.2.4.3. Fear of evil spirit

This sub-category describes the reason behind these both cultural-‘hamechisa’ and religious beliefs mentioned above in order not to take newborns out of home. Participants mentioned that community members do not seek care for sick newborns out of home due to fear of illness from evil spirits. This means that community members that share both of the above mentioned beliefs perceive that if newborns taken out of home before their date of baptism or taken to PNC or getting treatment or if celebrated their date of baptism before taken to ‘*wuqabi bet*’ and the *witch* blesses the newborn, they perceive the newborn would face different illnesses from evil spirits.

“Here there is a so called hammu-ebba [hammechissa] that is inherited from our ancestors...when we leave what our previous families’ belief or practice... one of family member either newborn, delivered mother or other might face a problem.” (45 years old, male, FGD participant, community member)

“...They fear that if newborns taken out of home, since she is small, it is said that she is not retained from peoples eye or she face evil eye. For this reason they do not take them out of home...” (34 years old, male FGD participant, community member)

5.2.5. Awareness about availability of sick newborn treatment service at health post

In the context of this study, awareness on the availability of sick newborn treatment service at health post implies that whether the community or care givers have heard [aware] or know as there is a service provided for sick newborns at health posts or not. Thus, this section contains description of communities’ awareness on availability of sick newborn treatment at HP, activities done to create awareness and promote the service for developing health seeking behavior of the community towards newborn illnesses.

Participants involved on this study mentioned as they did not heard, know or have awareness about availability of sick newborn treatment at health post unlike that of immunization, 2-5 month treatment service or maternal services; or mentioned that they did not sought health care for their sick newborns due to lack of awareness about availability of sick newborn treatment service at health post.

“...I do not know about the availability of newborn treatment there. I do not also perceive the presence of such treatment for this kind of newborns.” (21 years old, female, IDI participant, delivered women)

Participants mentioned that there was nothing done to create awareness and promote service availability for the community members in order to seek care from health posts.

“...Why they do not teach the people on daily, monthly or every two month? There is no such thing here...” (58 years old, male, FGD participant, community member)

Health care providers also mentioned that awareness creation and service promotion was not conducted on the availability of sick newborn treatment service for the community. The reasons mentioned for this were lack of giving attention for the program, poor commitment among health workers and unavailability of health extension workers at health posts on working hours.

“...since both of us, health extension workers and we as an office [health center], did not conduct activities expected from us, the community do not have awareness. Advocacy [to say service promotion] was not done on the type of services given especially related to newborn treatment...” (30 years old, male, IDI participant, head of HC and woreda drug store man)

“...If we take our catchment, we do not expect that HEWs are working at health post throughout days of a week...We are not expecting newborns would get such treatment with this condition...we do not counsel them to go health posts... we counsel them to come to health center.” (32 years old, male, IDI participant, HC under five clinics focal)

5.3. Health system related barriers and facilitators

Health system in the context of this study includes CBNC program ownership by health offices to implement it integrating with their routine activities, quality of health center and health post strength, health staffs available to provide and facilitate service delivery, supervision and monitorings given to health care providers, medical supplies and job aids, financial issues to implement this activity, one to five and health developmental army structure to facilitate health service utilization. Therefore, this theme contains description of barriers and facilitators related to availability of trained health staffs, supportive supervisions given to health extension workers, availability of medical supplies and job aids, strength of health center and health post linkage, functionality of one to five and health developmental army, financial issues, etc that are related to health system. These contents are described well under four categories which include equipped human resource, program ownership and

sustainability, strength of health center and health post linkage, medical supplies and job aids, and functionality of one to five and health developmental army. It has seven categories within it.

5.3.1. Equipped human resource

This category contains description of available and non-available health staffs within district health offices that directly or indirectly act as a barrier or facilitator for community based management for newborn PSBI. Health workers participated on this study mentioned that all rural HEWs available currently have taken basic CBNC training during starting of project implementation. They also mentioned as there is also one district health office expert had taken CBNC orientation and two health workers trained on IMNCI from each health centers.

“...they [HEWs] have taken CBNC, ICCM ...” (32 years old, male, IDI participant, HC under five clinics focal)

Unavailability of CBNC trained health staffs who monitors this activity from health center and district health office was one barrier mentioned by these participants that contributed to discontinuation of program implementation. This was due to turnover and no health staff was taken the training previously from HCs.

“...the reason for not conducting this is that at woreda level, there is no one who knows about CBNC in detail due to unavailability of trained manpower. There was one health worker trained at woreda level but currently, he was transferred to zone [ZHD] ...” (34 years old, male, IDI participant, District Health Office MNCH expert)

5.3.2. Shortage of health extension workers

In the context of this study shortage of health extension worker means that presence of one HEWs or no HEW per health post. Thus, in the study setting, there are two HPs which have only one HEW and also one health post with no HEW. This was happened due to transfer to other health posts or resigning. Due to this case participants mentioned that HPs are closed on working hours which affected community based service utilization.

“... For example, for this broad kebele, we have only one health extension worker... How can one health extension reach and create awareness all zones of this kebele...She is only one and if she go there [one zone], what about others or who come here [HP]...” (34 years old, male, FGD participant, community member)

5.3.3. Program ownership and sustainability

This category contains description of about how the program becomes discontinued after the implementing partner had phased out. Health care providers participated on this study mentioned that this program was initiated and implemented for three years in support of implementing partners with regular supportive supervision, monitoring and re-supplying of medical supplies and job aids. They mentioned that there were no supportive supervisions like integrated and program based supportive supervisions and PRCCM conducted in relating to CBNC activities, especially on community based management of PSBI among newborns after the implementing partner was phased out. They mentioned that implementation was discontinued or not sustained since implementing partners had been phased out due to lack of giving attention or considering community base management of PSBI among newborns as their own routine activities.

“Previously, IFHP was the one that supported this program...But, when they phased out, we lost our focusing to all of activities on this issue...We did not give our attention on CBNC issues and this is our gap...” (34 years old, male, IDI participant, district health office MNCH expert)

HEW also mentioned as they have discontinued checking or assessing the health status of newborns by taking RR, weight, temperature, and others; classifying and managing newborn either routinely or on home to home visit for providing PNC service or other activities after the implementing partner had been phased out.

“...it was discontinued treating 0-2 month newborns...At a time when peoples [implementing partner] were present, it was done highly but when they went, all things become discontinued...” (36 years old, female, IDI participant, HEW)

Different reasons like budget problem, lack of trained man power at HCs and district health office; lack of commitment among health facility managers, health care providers and HEWs were mentioned by participants.

“...the reason for not conducting this is that at woreda level, there is no one who knows about CBNC in detail due to unavailability of trained manpower. There was one health worker trained at woreda level but currently, he was transferred to zone [ZHD] ...To support these activities specifically, there is budget problem...On HEWs there is a problem like that of commitment and fed upping [burnout].” (34 years old, male, IDI participant, District Health Office MNCH expert)

Participants from health workers mentioned that as they failed to continue the implementation due to lack of skill or experience to supervise the programs activities specifically by their own. This is because the implementing partner did not integrate with health care providers from health centers during supervising HPS or overall program implementation. The implementer or program runners were only had integration with District Health Office and HEWs.

“...during that time, the NGO and health center were conducting separating...only the NGO and HEWs were the one who has relationship... HEWs bring the registration book. Integrating with health office [District health office], they saw it... Therefore, in thinking, the major problem was that this activity had to pass within our home [health center]. ...” (30 years old, male, IDI participant, head of HC and woreda drug store man)

5.3.4. Functionality of one to five and health developmental army

Functionality of one to five and health developmental army in the context of this study implies the presence of these structure or its members that can play a role in teaching mothers/care givers about newborn danger signs, creating awareness, promoting availability of the service, developing health seeking behavior of the community, provide PNC service, identify sick newborns and refer them to health extension workers or health facilities. Participants mentioned that, currently, there is no functional one to five networks or HDA available that conduct such activities to facilitate service utilization.

“...what is to be done in my belief is that this developmental army has very essential benefit for those who want to gain health care or utilize the service. So, since the government direction is also to avoid maternal and newborn death that might be become the next generation, it is important for this issue. But when we say it is available on the ground, fully it is not.” (34 years old, male, FGD participant, community member)

Health workers mentioned that due to this unavailability of functional one to five and HDA, as all of health activities performances, including community based management of PSBI among newborns were becomes low on the current time. They also mentioned that it is a barrier for health extension workers to conduct their activities properly.

“...what makes their [HEWs] activity to be hindered is just not making organizations below them to be functional like one to five networks.” (30 years old, male, IDI participant, head of health center and woreda drug store man)

Participants mentioned major reasons for its non-functionality which includes weakness during on their organization, last few years political instability [during emergency time], no follow up from HEWs, health workers, kebele command post or district level concerned bodies like women league, etc.

“... Previously, there were reports even until 100% in the absence of it on the ground...there is no functional one to five and health developmental army in our woreda as a whole. It was become nonfunctional due to the previous political instability or conflict. Second, the kebele command post is the major one that contributed it in order not to be functional...they did not support HEWs...” (34 years old, male, IDI participant, district health office MNCH expert)

5.3.5. Strength of health center and health post linkage

In the context of this study, health center and health post linkage implies the nature of monthly performance review meetings, usage of data for decision making and weekly based supportive supervision conducted to improve the capacity of health extension workers for better implementation from health centers. Thus, these all are described below on three sub-categories; availability of performance review meetings, no usage of data for decision making and no health workers commitment to provide regular supportive supervision for HEWs.

5.3.5.1. Availability of Performance review meetings

Performance review meetings in the context of this study implies the presence of monthly performance review meetings at HC level and quarterly at district health office level with HEWs to evaluate activities done and to plan together for better achievements. Thus, this study found that performance review meetings are conducted monthly at HC level HEWs and quarterly at district health office level with all HEWs. Health workers mentioned that discussions were conducted with HEWs on CBNC performances but HEWs do not conduct their activities due to commitment.

“... at HC level, we have monthly performance review meeting with HEWs. At that time we told them why they not worked, especially on ICCM and CBNC activities and

we gave them directions. But it is the same every month...” (32 years old, male, IDI participant, HC under five clinics focal)

5.3.5.2. No use of CBNC data for decision making

Data usage in the context of this study implies that a habit of using data by health center and district health office managers to take action for fostering, enhancing or improving the implementation of service utilization related to CBNC activities, especially on community based management of newborn possible serious bacterial infection management. Health workers mentioned as they do not utilize CBNC data for decision making.

“...Any ways the major problem within our home [health center] is, there is nothing done at a time when zero report or no activities were conducted.” (30 years old, male, IDI participant, head of HC and woreda drug store man)

5.3.5.3. No Health workers commitment to provide regular supportive supervision for HEWs

In the context of this study regular supportive supervision is an integrated type of supportive supervision given to health extension workers from health centers on weekly basis to improve knowledge and skill gap of HEWs, identify and solve challenges facing HEWs, monitoring HEWs, supporting in creating awareness and promoting available service to the community, supporting HEWs in strengthening one to five and health developmental armies. Thus, this study found that health workers do not provide a weekly based supportive supervision to health extension workers. They conduct it during EPI program or other periodic activities due to poor commitment, lack of monitoring from health center and district health office managers. Due to such problems, there is weak health center and health post linkage. HEWs do not open HPs on working hours; no functional one to five and health developmental army available at all kebeles.

“...PHCU [health center] and health post has very week linkage. There is a gap that they did not go weekly to support, identify and solve gaps of health workers [HEWs] unless there were other opportunities like campaign and periodic activities.” (34 years old, male, IDI participant, District Health Office MNCH expert)

5.3.6. Medical supply and job aids

Medical supply and job aid in the context of this study implies that the availability of supplies [i.e. see term and operational definitions section] that are used for checking or assessing and

managing sick newborns. Thus, this category describes issues related to medical supply and job aids that health workers and health extension workers faced since CBNC implementation has been started. They mentioned that as they did not face medical supply or job aid related problems since the time of CBNC implementation has been started. They mentioned that these medical equipments are supplied or re-filled from PFSA and zonal health department.

“...when you see as an office [health center] or organization [health office], we do not have any supply or medication problem for both under two months and all under five.” (30 years old, male, IDI participant, head of HC and woreda drug store man)

5.3.7. Budget constraint

Health center and district health office managers mentioned that budget constraint made them in order not to supervise or conduct PRCMM specifically to this program.

“...there is budget problem to go and visit all health posts and to pay for them per diem if you conduct PRCMM for at least two days... It is impossible to cover all things by government budget ...” (34 years old, male, IDI participant, district health office MNCH expert)

5.4. Health extension worker related barriers and facilitators

This theme contains descriptions of potential barriers or facilitators related to health extension workers. This in detail contains about where HEWs live and how they conduct their activities, health post opening hours and their commitment and how these conditions become a barrier or facilitator. These all things are summarized below under three categories; residence of HEWs, closure of HPs on working hours and HEWs commitment.

5.4.1. Residency of health extension workers

In the context of this study residency is where health extension workers live. So, this category describes well where health extension workers live and how their living condition affected service utilization. Thus, in this study setting, throughout the interviews and group discussions the most commonly mentioned issue by participants was that HEWs live at town. Health workers mentioned that except two HEWs, all other rural HEWs live and work travelling from District town. This is because there is no residence home constructed for them within the kebele; even they mentioned as both of these HEWs live together with their families. This happened due to lack of attention given from District Health office, health center, kebele, etc to construct home for them.

“...Among all these health posts, only two health extension workers live within the kebele. These also do not have their own residence rather they live together with their families who live in that kebele. No health extension workers have residency within the kebele. ...” (37 years old, female, IDI participant, health center MNCH focal)

Due to this cases participants mentioned that health posts are not opened on working hours and also no service is given on weekends and holidays. Through this, community members mentioned as they faced challenge to utilize the service from health posts.

“...Second this issue is illness...they [HEWs] are only available here for only two days. When they do not available here, we expense transport cost to go town [health center]. Since they are assigned as government employer, why do they live here and provide treatment service?” (32 years old, male, FGD participant, community member)

5.4.2. Closure of health posts on working hours

Working hours in the context of this study implies government daily working hours [i.e. 8 hours] which excludes weekends, holy days and night. This study explored days on which HEWs open health posts. Thus, over the course of interviews and group discussions the commonly mentioned issue mentioned by participants was that health extension workers open health posts from a maximum of three days per week. They also mentioned that there are times at which health posts are not opened throughout working hours of a day over the course of a week or might only opened on EPI days.

“...It [HP] might be open once per week...The health posts only open for EPI program but not for other activities. We are not expecting newborns would get such treatment with this condition.”(32 years old, male, IDI participant, HC under five clinics focal)

The issue is not only opening for a maximum of three days; on those days participants even mentioned that health extension workers might not reach health post on starting time of working hours or do not stay full working hours of a day due to working travelling from town. For example, participants mentioned that HEWs might not reach even till 4 or 5 AM [local time] or returns back early at around 8 PM [local time].

“...they might arrive there at three and half or four o clock [morning local time] and return back at around eight o clock [after noon local time]. Therefore, what happens during this time is that, our community members want to take especially their

newborns to health facility for getting service and return back before the sunrises [early morning]. At a time when they want to return back, our health extension workers arrive there, which creates fallacy...”(30 years old, male, IDI participant, head of health center and woreda drug store man)

Study participants were also mentioned that on these days if newborns become sick, they are taken to health center, private clinics or hospitals but there were also who mentioned as a newborn was died with without getting treatment on the day HEWs were not present, even if the families sought care.

“...At that time there were no any health professional or they [HEWs] did not here also, because they have a day where to come here.” (47 years old, female, FGD participant, community members)

Unavailability of health extension workers at HP over the course of a week to provide such treatment for newborns was the reason mentioned by health workers in order not to conduct awareness creation or service promotion.

“...If we take our catchment, we do not expect that HEWs are working at health post throughout days of a week...We are not expecting newborns would get such treatment with this condition...we do not counsel them to go health posts...because I do not want newborns to be taken to health posts for suffering. This is because at health post, no one is there. Therefore, we counsel them to come to health center.” (32 years old, male, IDI participant, HC under five clinics focal)

This happened due to the effect of living and travelling of HEWs from town, lack of HEW commitment, lack of monitoring given to HEWs from district health office, health center and kebele chairman. Therefore, this is one barrier for community based service utilization for PSBI management among newborns.

5.4.3. HEWs commitment to provide service

This section contains explanation of issues related to commitment of health extension workers in conducting their routine activities, especially provision of PNC service, which is used as an opportunity to address newborns with danger signs and PSBI, and treatment service. This is because this program acknowledges home to home visit for providing PNC as one CBNC package targeted to address sick newborns with PSBI and danger signs by checking their health condition. Participants mentioned that health extension workers are not

conducting their routine activities like providing PNC service, pregnant women conference, promoting availability of services, providing treatment at health posts unlike that of periodic or EPI activities.

“...If we take our catchment, we do not expect that health extension workers are working at health post throughout days of a week...” (32 years old, male, IDI participant, HC under five clinics focal)

“...One challenge is that, when we say that are health extension workers working their activities appropriately, they do not do that at all.” (37 years old, female IDI participant, midwife nurse)

Specific to provision of PNC service community members participated on this study mentioned that no follow –up was conducted for delivered mothers and their newborns on the first day, third day and seventh day. Participants mentioned as they do not heard or know about the schedules or importance of PNC, except that of immunization given on 45th day.

“I had a visit after deliver just yesterday [on newborn 45 day of life] with health extension workers... We know only as immunization is started on 45 day but we did not learn about post natal care visit schedules and its importance.” (32 years old, female, IDI participant, delivered women)

Health workers mentioned that HEWs are not providing PNC service due to living and travelling from town, not conducting their routine activities on working hours over the course of a week, lack of monitoring and regular supervision conducted to them from health center or district health office. But, there are problems identified on this issue. First, health workers not notify delivered women at health center to HEWs immediately. It might be notified once per week at a time when HEWs visit HC for weekly report or might be within 15 days to one month. Second, health workers mentioned that HEWs do not provide PNC service on home to home visit purposively rather they provide during EPI program. Therefore, with this condition PNC not conducted within critical days.

“...many of HEWs travel from here [town]. Therefore, their target when they travel from here is that outreach for EPI. During EPI time, they go there and provide post natal service for those who delivered at home and as well for mothers who returned after delivering at health facility. As I have told you it is given at home during this

time rather going purposively for it.” (30 years old, male, IDI participant, head of health center and district drug store man)

Health extension workers mentioned as they provide PNC service but they do not check [assess and classify] the newborn for any health conditions like danger signs and PSBI or manage accordingly; rather they ask the mother for any health problems and advise to go HC.

“...during postnatal care, we provide counseling and ask if there are problems...But we had discontinued checking their weight, respiratory rate, temperature and others ... we just simply advise orally and refer them to health center...”(36 years old, female, IDI participant, HEW)

With all the above mentioned issues related to health extension workers commitment, community based service utilization for PSBI management among newborns might be affected.

CHAPTER SIX: DISCUSSION

This study found community related barriers and facilitators like perception of no treatment, perception of non-severity and self-resolution, health care seeking decision making, belief on traditional medicines, socio-cultural and religious beliefs, and lack of awareness on availability of sick newborn treatment service at health post. This study also explored health system and HEWs related barriers and facilitators like lack of program ownership and sustainability, weak health center and health post linkage, availability of trained man power, shortage of HEWs, shortage of trained health staff, closure of HPs on working hours, poor commitment of HEWs to provide service, residence of HEWs, and availability of medical supply and job aids, and unavailability of functional one to five and HDA.

This study found that community members locally diagnose newborn illness as '*mitch*', '*kichit*', '*buda*', '*megagna*', '*berd*', '*gunfan/qufa*' and enlarged or dropped uvula from perceived but misconceived causes of illnesses when certain unspecific symptoms are seen on newborns which lead to perception of no need of treatment at all or no treatment existed at health facilities, perception of non-severity and self-resolution or use of traditional medicines or way of treatment rather than seeking care from health facilities. Therefore, this local newborn diagnosis implies that resulted community members to have misconception on treatment options. This finding is consistent with finding from a study conducted at central and southern Ethiopia, in which community members use herbal medicine to treat newborn illnesses like '*Mitch*', and traditional bone setter like '*wogasha*' to treat newborn illnesses. But, the way they sought care for '*megagna*' is different with this community members in that they sought care from health facility [27] unlike this study finding that community members treat newborns from megagna using traditional medicines which might happen due to socio-cultural difference. This finding also consistent with a study conducted in Nigeria that nursing mothers used herbal medicines for treating sick neonates and infants [39]. A study conducted in Bangladesh also showed that one of the barriers for formal health care seeking is a belief on traditional care [40]. A study also showed that community members treated uvulitis with less conservative traditional treatment like by putting leaves on the newborn's head and applying or rubbing the newborn head so that the uvula that descended into the throat ascends to its normal anatomy [41]. This is similar with the current finding in one way of treating enlarged uvula. But, this study finding showed that the symptoms mentioned by participants to each locally diagnosed newborn illness contains at least one newborn danger sign and sign of PSBI [1-4]. Therefore, this implies that community

members diagnose newborn illnesses misconceptionally which might be due to lack of awareness about newborn danger signs.

Health care seeking decision time of community members depends on manifestation of certain symptoms like unable to breast feed, gasping, grunting, high grade fever, weakness/lethargic, difficulty of [fast] breathing, frequent vomiting and change in the skin color to bluish on newborns. These findings are supported with findings from a study conducted at central and southern Ethiopia in that symptoms like continuous crying or irritability, inability to suck, fever, vomiting, diarrhea, stomach ache, difficult or fast breathing were used as signs of newborn illness for seeking care either from traditional or health facilities [27]. Other study also showed that mothers' stories of newborn illness started with a baby struggling to suck or when refusing breast's milk. Mothers who sought health-care typically identified three signs of severe illness: not breastfeeding, difficulties in breathing, and fever. This implies that in this study setting community members delay in seeking care for their sick newborns due to perception of non-severity and self-resolution, lack of newborn danger sign and trial of traditional medicines. This finding is consistent with findings from different studies conducted at different settings in that community members in those settings delay sought health care from health facilities due to expectation of self-resolution [26] and considering the symptoms as minor that resolve within next few days [25]. However, newborns with these signs or symptoms might not be treated at HP, for example, newborns with unable to breast feed at all need mandatory referral to higher health facilities for advanced management [3].

Lack of awareness on availability of the service at health post is one barrier for community members not to seek care for their sick newborns. This implies that there were no activities done to create awareness, promote the service and develop health seeking behavior of the community towards newborn illnesses. Community empowerment and demand creation is one key objective to create awareness and promote service for effective use of newborn and child survival interventions set on Ethiopian newborn and child survival program [14]. But, health workers did not create awareness or promote availability of sick newborn service at health posts for the community members due to lack of commitment, unavailability of HEWs at health posts on working hours, lack of program ownership and sustainability, weak health center and health post linkage and unavailability of functional one to five and health developmental activities in the study setting that facilitate service utilization. Lack of

knowledge on availability of appropriate treatment was also mentioned as a barrier for MNCH services [14].

This study also explore other barriers like cultural and religious beliefs in that community member do not take newborns out of home for seeking care before day of '*Kristina*' [baptism] or before taking to '*wuqabi bet*' and the witch blessing them due to fear of evil spirits or other illness like '*Mitch*'. This finding is similar with finding of a study conducted in Ethiopia which showed tradition recommends newborns to stay at home for 40 days because they are vulnerable to malevolent spirits [29, 41].

Lack of CBNC program ownership and sustainability resulted in lack of providing supportive supervisions that resulted in discontinuation or failure to sustain CBNC activities. This means that there were no supportive supervisions conducted even if the program is expected to be monitored through integrated supportive supervision twice a month, program-focused supervision once per month and PRCM twice a year [19]. This implies that HEWs and health workers from health centers and district health office did not gave their attention to the program considering it as their own routine activity due to lack of trained health staff that monitors the program at health center and district health office level, residency of HEWs, lack of commitment among health care providers, weak health center and health posts linkage.

The findings from this study also shows that HEWs did not get weakly based supportive supervision given from health workers and there is also lack of using PSBI management data for decision making. This implies that there is weak health center and health post linkage [42]. This might be due to lack of health workers commitment, lack of monitoring from head and focal of health centers or district health offices. From this study also found that there are two health workers trained on IMNCI from each health centers, and all rural HEWs who taken CBNC training which meet the expectation [19].

According to HEP, two HEWs should have to be assigned per HP [43]. But, in this study area there are two HPs which have only one HEW and one HP with no HEW which happened due to transfer and resigning. One of HEW recruitment criteria is residence in the village [43] and also CBNC acknowledges the importance of available HEWs in close proximity of the community to provide gentamycin injection for newborns with PSBI for seven days [19]. But, the finding from this study shows that except two HEWs, all other rural HEWs live at district town due to lack of constructed home at assigned kebeles. These all has an implication in that health posts are not opened at all days on working hours or service is not given for sick newborns on working hours, weekeneds, holy days or night time. This is

because the finding from this study showed health posts are open for a maximum of three days per week and less than five hours per day. Therefore, this study finding is below the findings of a study which showed that approximately fifteen percent HPs were open less than five days of week and also a little over a half of HEWs serve the community weekends or holidays [19]. Similarly this finding is below when compared with finding from observational time motion study conducted on HEWs for twenty one days which showed HEWs were on duty for average of fifteen point five and they stayed on duty for about six hours per day [44] it is lower.

Post natal care (PNC) is essential for teaching care givers how to recognize sick newborns, screening or identifying sick newborns and provide care on the riskiest periods, first day and week of life. So, provision of home to home PNC service is essential within 24 hours of delivery, third and seventh day which used as an entry point to get sick newborn to provide treatment. CBNC is introduced to address sick newborns through home visit also in the immediate postnatal period by a HEW to identify and treat illnesses in newborns with amoxicillin and gentamycin [12, 19, 41]. But, the result from this study shows that delivered mothers did not gained PNC service on these critical days or HEWs did not check newborns for danger signs and sign and symptom of PSBI due to lack of commitment, working travelling from town, no monitoring given to HEWs from health centers and district health office, closure of health posts on working hours. This implies that if health extension workers were providing PNC service on home to home visit, newborns would be addressed and checked for danger signs and PSBI; an opportunity to provide the service.

Health extension program is facilitated when HEWs are conducting the packages in support of one to five and health developmental armies organized with in the kebele. This is because they play a role in increasing health care seeking behavior of the community regarding MNCH services, promoting availability of services delivered at the community and health facility level including ICCM, CBNC, skill birth etc. [14]. Achievements also seen from them related to pregnancy identification, providing ANC and PNC counseling service, sick newborn identification, referring sick children to health posts, carry out social mobilization activities to increase the knowledge, develop attitude and health seeking behavior of mothers [19]. But, the result from this study shows that there is no functional one to five networks and HDA available at the study area. participants also mentioned that due to this problem as all of HEW packages achievement are low, especially community based management of newborn PSBI due to lack of this structure at lower level within the community that facilitate

newborns to get service by checking for danger signs, identifying sick newborns and referring them to HEWs or health centers.

Strength and limitation

The strength of this study is involvement of participants from different socio-demographic backgrounds, use of mixed data collection techniques and exploring community's perception on newborn illness and home based management and other barriers and facilitators at community, health post, and health center, District Health Office level, and health care provider level have been explored. On this study there might be recall bias since it explored participant's experience.

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATIONS

CONCLUSION

This study found facilitators like availability of HEWs trained on CBNC, health workers trained on IMNCI, oriented health worker at district health office level, regular performance review meetings and medical supplies and job aids. This study also explore potential barriers which include community related barriers: communities perception on newborn illness [perception of no treatment, and perception of non-severity and self-resolution], belief of traditional medicine, delay in health care seeking, socio-cultural and religious beliefs, lack of awareness on availability of sick newborn treatment service at health post; health system, facility related barriers: lack of program ownership aand sustainability, weak health center and health post linkage, shortage of HEWs, lack of CBNC trained health worker from HCs and district health office; HEWs related barriers: residency of HEWs, closure of HPs on working hours, and poor commitment of HEWs to provide service; and unavailability of functional one to five and health developmental army. From this it is possible to conclude that community based management for newborn PSBI is affected from barriers at different contexts [community, health system, health worker, HEWs].

Thus, this study finding reveals that from not effectively applying explored potential facilitators to provide the service on the ground and due to these barriers, currently, implementation of community based management of newborn PSBI was discontinued . This implies that in the presence of such conditions, it might not be possible to reduce newborn deaths attributed to possible serious bacterial infection through this community based program. Therefore, this call to take action by developing strategies targeted to address barriers at different context; community/ caregiver, health system, health extension workers and one to five and health developmental army to foster or continue the program implementation aiming to reduce newborn death attributed to severe bacterial infection. Furthermore, health care providers should have to own the program to provide treatment, promote service availability for the community to aware them on availability of sick newborn treatment at HP and develop health seeking behavior towards newborn illnesses.

RECOMMENDATIONS

Based on the study findings the following recommendations go to specific concerning bodies:-

Health extension workers:-

- ♣ Should have to open the health post and provide the service on working hours.
- ♣ Should have provide PNC service on home to home visit to use it as an opportunity for checking and managing newborns with danger signs and sign and symptoms of PSBI.
- ♣ Should have to consider community based management of newborn PSBI as their routine activity.
- ♣ Should have to teach mothers about danger signs and when to seek care, work on creating awareness or promote availability of sick newborn treatment at health post and work to develop health seeking behavior of the community for newborn illnesses.

Health center managers and health workers: -

- ♣ Should have to strength the HC-HP linkage to provide regular or continuous supportive supervision to improve the capacity of HEWs and for monitoring them to conduct their activities on over the working hours over the course of a week.
- ♣ Should have to support HEWs to continue community-based management of newborn PSBI considering as their own routine activity.
- ♣ Midwives, HEWs and other health care providers should have to enhance ANC, institutional delivery, PNC and pregnant women conference to use them as an opportunity to change community's perception on newborn illnesses, create awareness about the availability of sick newborn treatment at HP and develop health seeking behavior among community members. Integrating with kebele chairman, they should have support HEWs to conduct community mobilization to empower and create demand among the community members for developing health seeking behavior for sick newborns treatment at HP.

District Health Office manager and staffs:-

- ♣ Should have to monitor HCs and HEWs strictly to establish strong HC-HP linkage through continuous supervision.
- ♣ Should have to monitor and evaluate the implementation status of community based management for newborn PSBI considering it as one of their routine activity.

- ♣ Should have request CBNC training need from ZHD, RHB and other implementing partners to provide basic CBNC training for HWs and refreshment training for HEWs.

Zonal Health Department:-

- ♣ Should have to provide continuous supervision and monitoring to District Health Office to continue implementing CBNC activities as routine activities to develop sense of ownership and sustainability.
- ♣ Should have support District Health office in filling gaps on trained health workers through on job training or basic training and to train new HEWs.

Kebele chairman:-

- ♣ Should have support HEWs to reorganize functional one to five and HDA that will play a role on empowering and creating demand, developing health seeking behavior, identifying sick newborn and referring to HEWs for management.
- ♣ Should have strictly follow and report to health centers or District Health Office whether HEW open health posts or not, available on routine activity or not.
- ♣ Should have to mobilize resource from community members to construct residence home for HEWs.

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ANNEXES

Annex 1: Study participant information sheet [English version]

Project title: Exploring barriers and facilitators of Community Based service utilization for newborn PSBI in Debre Libanos District, North Shoa, Oromia, Ethiopia, 2019.

Human Research Ethics Committee Approval Number: THRPG/301/2019

Principal Investigator: Dr. Garumma Tolu and Mr. Yohannes Kebede

Student Researcher: Kasahun Girma

Student's Degree: MPH

Invitation: Dear participants, you are invited to participate in the research project described below. Please take your time to look at the information sheet before you decide to participate on the study. If you are interested in finding out more or to ask any questions, please contact the researcher and principal investigators by the e-mail address or phone number below. Please feel free to discuss the study with others if you wish.

What is the project about?

The purpose of the study is to describe barriers of community based service utilization for newborn possible serious bacterial infection management in Debre Libanos District. The findings of this study will be used to take action for increasing its utilization at your community to reduce newborn mortality.

Who is undertaking the project?

This project will be undertaken by Kasahun Girma who is a post graduate student at Jimma University. On this study research assistants will be involved supporting on the whole process of the research in facilitating participant recruitment, interview and discussion, taking note, taking attendance, consent and attendance.

Why am I being invited to participate?

You have been recruited based on your role of responsibility in different settings, ability to influence others, ability to have or generate rich information on the study area objectives. The participants include health workers from woreda health office, health center, health post, kebele chairman, one to five network leaders, health developmental leaders, and religious leaders. These participants include both males and females whose age are greater than or equal to 18 regardless of their marital status.

What will I be asked to do?

Taking part in the study is entirely voluntary, and if you do not want to be involved, this will not affect your and your community newborns care and health service utilization for possible

serious bacterial infection in any way. If you are interested in taking part, you will be asked to complete a consent form before participating, a copy of which you will keep. If you wish to withdraw your consent at any point, you are free to do so without giving a reason. If you agree to take part in the study, convenient time will be arranged for interview and group discussion.

How much time will the project take?

This interview will be conducted in between you and the researcher and might last for about 30-60 minutes. But the discussion will be conducted with you and others recruited in similar ways like you which might last for 1:30-2:30 hour. The interview will be conducted at your set up (in your own home or at work place) and the discussion follows at a common setting for all participants depending on your preference.

What will be the payments?

You will be reimbursed for any travel expenses as per public transport expense rate. The researcher will also cover your lunch and refreshments expenses.

What are the Contents of the interview and discussion?

During the interview and discussion time you will be asked questions related to your knowledge, skill and experience you have on community based management of newborn possible serious bacterial infection.

Are there any risks associated with participating in this project?

Whilst we do not anticipate that you will experience any distress, you will be aware that you have the right to speak based on your knowledge, understanding and experiences on community based management of possible serious bacterial infection. You will be encouraged to take a break whenever necessary during the interview, discussion and you can decide to stop the interview at any point. The researcher will also provide time at the end of the interview to discuss any concerns.

What are the benefits of the research project?

Although this study does not intend to provide any specific benefits to individuals taking part, it is hoped that the information we gain could help improve community based management of newborn possible serious bacterial infection in your community aiming to reduce newborn deaths.

What if there is a problem?

If you experience any problems due to taking part in the study, the researcher will discuss on these issues with you.

What about confidentiality of participating on this project?

The researcher will follow ethical and legal practice and all information about you will be handled in confidence. All information about your participation in this study will be kept confidential through:

- Your interview will be audio-recorded and will be typed up later, with all identifying information removed. The audio-recording will be listening by clinical research tutor.
- Transcripts (typed copies of your interview) will be kept electronically on a password protected and encrypted computer.
- Your anonymised (removed particular part) transcript will be seen by members of the research team, employed by Jimma University.
- Once the research is completed (might be at the end of June, 2019) electronic copies of the transcript will be stored securely until the point of secure disposal.
- If, during the interview and discussion, the researcher concerned that you or somebody else is at risk of harm, he will have to break confidentiality to inform my supervisors and seek advice. However, he will discuss this fully with you at the time.

What will happen if I don't want to withdraw or carry on with the study?

You are able to withdraw from the study at any point and you will not be expected to provide a reason. You can contact the researcher to discuss withdrawing from the study, at which point any data and personal information relating to you will be destroyed.

What will happen to the results of the research study?

As the study is part of the researcher master's thesis, it will be submitted to the Jimma University. The researcher also hopes to publish the findings of this study in a relevant journal and perhaps present this at a conference. A brief report of the findings will be sent to interested participants. Participants will not be identified within any of these publications, but anonymous quotes will be included, if you provide your consent for this.

Organizer and source of fund for the research

The researcher has organized research and all expenses will be covered by him.

Who has reviewed the study?

All research's that will be conducted under Jimma University is looked at by an individual group of people, called a Research Ethics Committee (REC). This study has been reviewed and approved by Jimma University Research and Ethics Committee.

Rational to the results of the study

The result of this study will be disseminated to Jimma University, zonal health department, woreda health office, health centers and to different stake holders. So, these study findings will be used for academic purpose and for addressing such factors in order to improve

utilization of community based newborn care for reducing newborn mortality in your community and may be other country parts as a whole.

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at Jimma University (approval number). If you have questions or problems associated with the practical aspects of your participation in the project, or wish to raise a concern or complaint about the project, then you should consult the Principal Investigator. Contact the Human Research Ethics Committee's Secretariat on phone 0471120945 or e-mail Zelege.mekonnen@ju.edu.et or you can contact principal investigators using cell phone 0931523749 (Dr. Garumma Tolu) and 0961891139 (Mr. Yohannes Kebede). If you wish to speak with an independent person regarding concerns or a complaint, the University's policy on research involving human participants, or your rights as a participant.

If I want to participate, what do I do?

If you want to participate in the project, please return the signed consent form to the researcher and arrange a place and time for interview. By submitting this form you are indicating that you have read the description of the study, are over the age of 18, and that you agree to the terms as described in the short questionnaire that follows:

Yours sincerely,

Dr. Garumma Tolu

Mr. Yohannes Kebede

Mr. Kasahun Girma

Annex 2: Written Consent form for IDI and FGD [English version]

Title:	Exploring barriers and facilitators of Community Based Service Utilization for Newborn PSBI in Debre Libanos District, North Shoa,
Ethics Approval Number:	THRPG/301/2019

I have read the information on this form and received a copy of it. I understand the purpose and nature of this study and I am participating voluntarily. I understand that I can withdraw from the study at any time, without any penalty or consequences.

1. I have had all my questions answered to my satisfaction by the research worker and my consent is given freely.
2. I agree to take part in this study and I hereby grant permission for the data generated from this research to be used in the researcher's publications on this topic.
3. Although I understand the purpose of the research project it has also been explained that involvement may not be of any benefit to me.
4. I grant permission for the research to be recorded and saved for purpose of review by the researcher, supervisor / principal investigator, and ethics committee.
5. I grant permission for the research recordings to be used in presentations or documentation of this study. And also I have been informed that, while information gained during the study may be published, I will not be identified, and my personal results will not be divulged.
6. I understand that I am free to withdraw from the project at any time.
7. I am aware that I should keep a copy of this Consent Form, when completed, and the attached Information Sheet.

Participant to complete:

Name: _____ Signature: _____ Date: _____

Researcher to complete

Name: _____ Signature: _____ Date: _____

If you have any questions at any time about this study or the procedures, you may contact the researcher using address: 0919375374 or e- mail: kasahungirmadera@gmail.com

Thank you for taking the time to read this information sheet

Annex 3: Study participants information sheet [Amharic version]

በጥናቱ ላይ ለሚሳተፉ ተሳታፊዎች ስለ ጥናቱ ዝርዝር መረጃ

የጥናቱ ርዕስ:- የማህበረሰብ ተኮር ጨቅላ ህጻናት ህክምናን የሚያሰናክሉ እንቅፋቶች እና ምቹ ሁኔታዎች ላይ የሚሰራ ጥናት

የፈቃድ ደብዳቤ ቁጥር: THRPG/301/2019

ጥናቱ ዋና አማራጮች: ዶ/ር ጋራማ ቶሎ እና አቶ ዮሐንስ ከበደ

ጥናቱን የሚያጠናው ተማሪ: ካሳሁን ግርማ

የሚያጠናበት የት/ት ደረጃ: በህብረተሰብ ጤና ማስተርስ ተማሪ

ጥሪ: ውድ ተሳታፊዎች ከዚህ በታች በዝርዝር በተገለጸው ጥናት ላይ እንድትሳተፉ ተጋብዛችኛል። እባክዎን ለመሳተፍ ከመወሰኖ በፊት ዝርዝር መረጃውን ሰዓት ወስደው ያንብቡት። ምንም አጥነት ጥያቄ ካላችሁ ወይም ለበለጠ መረጃ ከትች በተቀመጠላችሁ የስልክ ቁጥር ጥናቱን የሚያጠናውን ማግኘት ትችላላችሁ።

ጥናቱ ዓላማ ምንድን ነው?

የዚህ ጥናት ዋና ዓላማ በደብረ ሊባኖስ ወረዳ ላይ የማህበረሰብ ውስጥ የምስጢውን የጨቅላ ህጻናት ህክምና የሚያሰናክሉ እንቅፋቶች ምን እንደሆኑ ለማወቅና በማግኘት ውጤትም የአገልግሎት ተጠቃሚነትን በመጨመር የጨቅላዎችን ሞት ለመቀነስ የሚሰራ ጥናት ነው።

ጥናቱን የሚያከናውነው ማነው?

ይህ ጥናት የሚከናወነው የጅም ዩኒቨርሲቲ የሁለተኛ ድግሪ ተማሪ በሆነው ካሳሁን ግርማ ነው። ነገር ግን ጥናቱን የሚያግዝ አንድ ሰውም የሚሳተፍ ይሆናል።

ለምን በዚህ ጥናት ላይ እንድትሳተፉ ተጋብዝኩ?

እርስዎ በዚህ ጥናት ላይ እንዲሳተፉ የተመረጡበት ምክንያት በማህበረሰቡ ውስጥ ባላችሁ ሚና፤ በተሻለ መልኩ ተሰሚነት ያልዎ በመሆኑና በተሻለ መልኩ ሃሰብ ማመስጨት የሚችሉና የዚህን ጥናት ዋና ዓላማ ታሳካላችሁ ተብሎ ስለታሰበ ነው።

ይህ ጥናት ምን ያህል ሰዓት ሊወስድ ይችላል?

ለቃለ መጠይቅ ከሆነ የተጋበዙት ከ30-60 ደቂቃ፤ ለውይይት ከሆነ ደግሞ ከ1:30-2:30. ለቃለ መጠይቅ የሚደረገው በቤቶ ወይም በስራ ቦታዎ፤ ውይይት የሚካሄደው ደግሞ በውይይቱ ላይ ለሚሳተፉት ሰዎች አማካኝ በተነበት ቦታ ነው። ለቃለ መጠይቁም ሆነ ውይይቱ በድምጽ መቅጃ ተቀድቶ በሃላ ላይ ሙሉ በሙሉ ወረቀት ላይ የሚገለበጥ የሆናል።

ምን አይነት ክፍያ ሊኖረው ይችላል?

አስፈላጊ ሆኖ ከተገኘ የትራንስፎርት ወጪ ሊሸፈን ይችላል፤ ጥናት አድራጊው ሻይ ቡናና ምሳ ሊሸፍን ይችላል።

ቃለ መጠይቁና ውይይቱ ምን ይዘት አለው?

በቃለ መጠይቁ ወይም የጋራ ውይይቱ የሚነሳው ሃሳብ የእርሶን እውቀት፣ ክህሎትና ልምድ መሰረት ያደረገ ነው።

በመሳተፌ ምን አይነት አደጋ ሊያጋጥመኝ ይችላል?

በዚህ ጥናት ላይ በመሳተፎ ምንም አይነት አደጋ ይደርስብታል ብለን አናስብም። ሆኖም ግን ምንም አይነት ስጋት ካለዎት በማንኛውም ሰዓት ቃለ መጠይቁን ወይም ውይይቱን ማቀረጥ ይችላሉ። ከቃለ መጠይቁ ወይም ውይይቱ መጨረሻ ላይ ያለዎትን ስጋት ወይም ጉዳይ ለመወያየት ጥናቱን የሚያከናውነው ሰው ሰዓት ሊሰጠት ይችላል።

የዚህ ጥናት ጥቅም ምንድን ነው?

ምንም እንኳን ይህ ጥናት በግለሰብ ደረጃ ጥቅም ባይኖረውም፤ ከዚህ ጥናት የሚገኘው መረጃ በማህበረሰብ ደረጃ የሚሰጠውን የጨቅላ ህጻናት ህክምና አገልግሎትን በመጨመር የጨቅላ ህጻናትን ሞት ይቀንሳል ብለን እናማናለን።

በዚህ ጥናት ላይ በመሳተፊ ሚስጥረኝነቱ ምን ይህል ነው?

አጥኚው የጥናት ህገ-ደንቦችን የሚከተልና በዚህ ጥናት ላይ የሚገኙ መረጃዎችን ሚስጥር የመጠበቅ ግዴታ አለበት። በውይይት ወይም በቃለ መጠይቅ ጊዜ የተቀረጹ ድምጾች ወደ ወረቀት ከተገለበጡ በሃላ ይጠፋሉ። በወረቀት ላይ የተገለበጠውም ወደ ኮምፒተር ከተገለበጠ በሃላ ጥናቱ አልቆ እስከሚሰረዝ ድረስ በሚሰጡል ቁልፍ ይቆለፋል። በውይይቱ ወይም በቃለ መጠይቁ ጊዜ ተሳታፊን አደጋ ላይ የሚጥል አጋጣሚዎች ከተከሰቱ አጥኚው ምናልባት ጥናቱን ከሚከታተሉ ግለሰቦች ጋር ለመወያየት ሚስጥርነቱን ሊጥስ ይችላል። ሆኖም ግን ይህንንም ከእርስ ጋር ተወያይቶ ነው።

በዚህ ጥናት ላይ ባልሳተፍ ወይም ማቀረጥ ብፊልግ ምን ሊሆን ይችላል?

ምንም ምክንያት ጥናቱ ላይ ያለመሳተፍ ይችላሉ። ጥናቱን ማቀረጥ ብፊልግ ያለ ምንም ምክንያት በማንኛውም ሰዓት ማቀረጥ ይችላሉ። በዚህ ጊዜ በእርስ በኩል የተሰጡ መረጃዎች እንዲሰረዙ ይሆናል።

የዚህ ጥናት ውጤት ምን ሊደረግ ይችላል?

ይህ ጥናት የሁለተኛ ዲግሪ መመሪያ ስለሆነ ለጅም ዩኒቨርሲቲ ይቀርባል። ይህ ጥናት በተለያዩ ኮንፈረንስ ላይ ሊቀርብ ይችላል፤ በተለያዩ ጆርናሎች ላይ ሊሰራጭ ይችላል። ይህ በሚሆንበት ጊዜ የተሳታፊን ማንነት የሚያሳዩ መረጃዎች አይኖሩበትም።

ይህን ጥናት አይቶ እንዲሰራ ፈቃድ የሰጠው ማን ነው?

ይህን ጥናት አይቶ እንዲሰራ ፈቃድ የሰጠው የጅም ዩኒቨርሲቲ ጥናትና ምርምር ኮሚቴ ነው።

የዚህ ጥናት ውጤት አስፈላጊነቱ ለምንድን ነው ?

የዚህ ጥናት ውጤት ለተለያዩ አካላት ማለትም ለምሳሌ ለጅም ዩኒቨርሲቲ፤ ዞን ጤና መምሪያ፤ ወረዳ ጤና ጥበቃ ጽ/ቤት፤ ጤና ጣቢያ፤ ወዘተ ተሰራጭቶ ለመማሪያነትና በዋናነት የጨቅላ ህጻናትን ሞት ለመቀነስ ታሳቢ ያደረገ ነው።

በጥናቱ አሰራር ላይ ቅሬታ ካለኝ ማንን ማናገር እችላለሁ?

በጥናቱ አሰራር ላይ ቅሬታ ካላችሁ ወይም ችግር ካጋጠማችሁ በስልክ ቁጥር 0931523749 ዶ/ር ጋሩማ ወይም በ0961891139 አቶ ዮሐንስ ብላችሁ በመደወል ማግኘት ትችላላችሁ፤ ወይም በ0471120945 ዶ/ር ዘለቀ ብላችሁ በመደወል ጥናቱን አይቶ የፈቀደውን ማግኘት ትችላላችሁ።

ምን እንዳደርግ እጠየቅ ይሆን?

ይህ ጥናት ሙሉ በሙሉ ፈቃደኝነት ላይ የተመሰረተ ስለሆነ በዚህ ጥናት ላይ ለመሳተፍ ፍላጎት ካለዎ የተሳታፊነት ፈቃድ መስጫ ፈርም ላይ ፈቃድን እንዲሰጡ ወይም እንዲሞሉ ይጠየቃሉ እናም ለውይይቱም ሆነ ለቃለ መጠይቁ ምቹ ቀን እና ሰዓት ቀጠሮ እንዲያያዝ ይደረጋል ። በማንኛውም ሰዓት ፈቃድን መሰለዝ ከፈለጉ ምንም ምክንያት መስጠት ሳያስፈልግ ማቀረጥ ይችላሉ። ፈቃድ ሲሰጡ እድሜዎም 18 ዓመትና ከዚያ በላይ እንደሆነም ጭምር በማረጋገጥ ነው።

ከሠላምታ ጋር,

ጋሩማ ቶሎ (ዶ/ር)

ዮሐንስ ከበደ

ካሳሁን ግርማ

Annex 4: Written consent form for IDI and FGD [Amharic version]

የተሳታፊነት ፈቃድ መስጫ ወረቀት

ርዕስ:- የማህበረሰብ ተኮር ጨቅላ ህጻናት ህክምናን የሚያሰናክሉ እንቅፋቶች እና ምቹ ሁኔታዎች ላይ የሚሰራ ጥናት

የፈቃድ ደብዳቤ ቁጥር: THRPG/301/2019

አኔ ከላይ ያለውን መረጃ አንብቤ ቀሪውንም ወስኛለሁ። ስለሆነም የጥናቱን ዋና አላማ ስለተረዳሁ በፈቃዴ ጥናቱ ላይ ለመሳተፍ ወስነኛለሁ። በፈለኩት ሰዓትም ያለምንም ቅጣትና ፍራቻ ማቀረጥ እንደምችል ተገንዝቤአለሁ።

1. ሁሉንም ጥያቄዎቼን ጥናቱን በምሰሩ ሰዎች ስለተመለሱልኝ ለመሳተፍ ፈቃዴን በግልጽ ሰጥቻለሁ።
2. በዚህ ጥናት ላይ ለመሳተፍና ከዚህ ጥናት የሚገኘውንም ውጤት ለህዝብ እንዲወራጭ በፊርማዬ አረጋግጣለሁ።
3. ምንም እንኳን የጥናቱን ዓላማ ብረዳም ፤ መሳተፌ ለራሴ ጥቅም ላይኖረው እንደሚችል ተረድቻለሁ።
4. ይህ ጥናት ተቀድቶና ፍይል ሆኖ በሚመለከታቸው የጥናቱ ሰዎች፤ አስተናጋቾችና ጥናቱ እንድሰራ ነፈቀዱት ሰዎች ቢታይ ምንም ቅር እንደማይለኝ በፊርማዬ አረጋግጣለሁ።
5. ይህ ጥናት በየትኛውም ቦታ ቢቀርብና ለዶክመንቴሽን አላማ ቢውል የማልቃወም መሆኔን በፊርማዬ አረጋግጣለሁ። እና ደግሞ እዚህ ጥናት ላይ ያሉት መረጃዎች እኔን የማይጠቅሱና እኔ እንዳልከቸው የሚሳውቅ ነገር እንደማይኖረው ተረድቻለሁ።
6. በማንኛውም ሰዓት ጥናቱን አቀርጬ መውጣት እንደምችል ተረድቻለሁ።
7. በዚህ ጥናት መጨረሻ ላይ ይህን የፈቃድና የመረጃውን ወረቀት ቀሪ ማስቀመጥ እንዳለብኝ ሰምቻለሁ።

በተሳታፊ የሚሞላ

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ስም	ፊርማ	ቀን

በጥናት እድራጊው የሚሞላ

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ስም	ፊርማ	ቀን

ለበለጠ መረጃ በስልክ ቁጥር 0919375374 ደውላችሁ ጥናቱን የሚሰራውን ሰው ማግኘት ትችላላችሁ።

እናመሰግናለን!!!

Annex 5: In-depth interview guide for health workers and HEW [English version]

1. Socio-demographic related questions:-
 - a. How old are you?
 - b. Please would you tell me your educational status?
 - c. Please would you tell me your marital status?
 - d. Please would you tell me number of children you have?
 - e. Please would you tell me your occupation?
 - f. Please would you tell me your profession?
 - g. Please would you tell me your ethnicity?
 - h. Please would you tell me your religion?
2. Please would you tell me about newborn care?
3. Please would you tell me what you know about CBNC?
4. Please would you tell me CBNC activities performance in your catchment?
5. Please would you tell me activities you done to enhance CBNC activities performance?
6. Please would you tell me about supportive supervision you have done for HEWs on community based management of newborn PSBI?
7. Please would you tell me barriers related to medical supplies and job aids that affected its service utilization?
8. Please would you tell me barriers related to community that affects its service utilization?
9. Please would you tell me barriers related to health facility that affects its service utilization?
10. Please would you tell me barriers related to HEWs that affects its service utilization?
11. Please would you add anything left that affect community based management of newborn PSBI?
12. Please would you summarize for me what you told me till know?

Annex 6: In-depth interview guide for health workers and HEW [Amharic version]

የመወያያ ነጥቦች/የቃለ ምልልሱ መነሻ ሀሳቦች

1. የተሳታፊው ግል መረጃ?
 - ሀ. እድሜ/ሽ ስንት ነው?
 - ለ. የት/ት ደረጃ/ሽ ስንት ነው?
 - ሐ. የትዳር ሁኔታ/ሽ ምንድን ነው?

- መ. ስንት ልጆች አሉህ/ሽ?
 - ሠ. ስራህ ምንድን ነው?
 - ረ. የት/ት ሙያህ ምንድን ነው?
 - ሰ. ብሄርህ የት ነው?
 - ሸ. ስለ ህፃናት ጤና እንክብካቤ የምታውቀው/ቁውን እስኪ ንገረኝ/ሪኝ?
3. ስለ CBNC የምታውቀው/ቁውን እስኪ ንገረኝ/ሪኝ?
 4. የ Community based management of newborn possible serious bacterial infection አገልግሎት አጠቃቀም ምን ይመስላል?
 5. አገልግሎቱን ለመጨመር ምን የተሰራ ስራ አለ?
 6. ለጤና ኬላዎች ምን አይነት ድጋፋዊ ክትትል አድርጋችሁላቸው ታውቃላችሁ በ community based management of possible serious bacterial infection ዙሪያ?
 7. የጨቅላ ህጻናትን ለመመርመርና ለማከም እንቅፋት የሆኑ የህክምና መገልገያ ግባቶችና መድሃሊቶች ምን ነበሩ?
 8. በምህበረሰቡ በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ/ሽ ታስባለህ/ቢያለሽ?
 9. በጤና ተቀማት በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ/ሽ ታስባለህ/ቢያለሽ?
 10. በጤና ባለሙያዎች በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ/ሽ ታስባለህ/ቢያለሽ?
 11. በመጨረሻ ቀረ የምትለውን ነገር ንገረኝ እስኪ?
 12. እስኪ አሁን ደግሞ እስካሁን ያነሳህልኝ/ሽልኝን ነገር ጠቅለል አድርገህ/ሽ ከልሰልኝ/ሽልኝ?

Annex 7: In-depth interview guide for delivered mothers [English version]

1. Socio-demographic characteristic related questions:-
 - a. How old are you?
 - b. Please would you tell me your educational status?
 - c. Please would you tell me your marital status?
 - d. Please would you tell me number of children you have?
 - e. Please would you tell me your occupation?
 - f. Please would you tell me your profession?
 - g. Please would you tell me your ethnicity?
 - h. Please would you tell me your religion?
2. Please would you tell me about your antenatal care?
3. Please would you tell me information have you got during your antenatal care?
4. Please would you tell me about your post natal care?

5. Please would you tell me information what you got on your post natal visits?
6. Please do you know about newborn care?
7. Please would you tell me types of newborn illnesses you know?
8. Please would you tell me the causes of each newborn illness you know?
9. Please would you tell me the symptoms of each newborn illness you know?
10. Please would you tell me when you decide seeking care for sick newborns?
11. Please would you tell me what you do for sick newborns?
12. Please would you tell me barriers related to the community that affect community based service utilization for sick newborns in your area?
13. Please would you tell me barriers related to health facility that affect community based service utilization for sick newborns in your area?
14. Please would you tell me barriers related to HEWs that affect community based service utilization for sick newborns in your area?
15. Please would you tell me anything left that you want to raise regarding this issue?
16. Finally, please would you summarize what you have mentioned till now?

Annex 8: In-depth interview guide for delivered mothers [Amharic version]

የመወያያ ነጥቦች/መነሻ ሀሳቦች

1. የተሳታፊው ግል መረጃ?

ሀ. እድሜሽ ስንት ነው?

ለ. የት/ት ደረጃሽ ስንት ነው?

ሐ. የትዳር ሁኔታሽ ምንድን ነው?

መ. ስንት ልጆች አሉሽ?

ሠ. ስራሽ ምንድን ነው?

ረ. የት/ት ሙያሽ ምንድን ነው?

ሰ. ብሄርሽ የት ነው?

ሸ. እስኪ የእርግዝና ክትትልሽ ምን ይመስል እንደነበር ንገራኝ ?

3. እስኪ በእርግዝና ክትትልሽ ወቅት ያገኘሻቸውን መረጃዎች ንገራኝ ?

4. እስኪ የድህረ ወሊድ ክትትልሽ ምን ይመስል እንደነበር ንገራኝ ?

5. ስለ ህፃናት ጤና እንክብካቤ የምታውቀው/ቁውን እስኪ ንገራኝ?

6. ምን አይነት የጨቅላ ህጻናት ህመሞችን ታወቁያለሽ?

7. እያንዳንዳቸው የጨቅላ ህጻናት ህመሞችን በምን ምክንያት ሊመጡ ይችላሉ ብለሽ ታስቢያለሽ?

8. የእያንዳንዳቸው ጨቅላ ህጻናት ህመሞች ምልክታቸው ምን ናቸው ብለሽ ታስቢያለሽ?

9. መቼ ነው ጨቅላ ህጻን ታመመ ተብሎ ህክምና ለመውሰድ የምታስቡት / ምን ምልክት ሲታይናቸው ነው ብለሽ ታስቢያለሽ?
10. ለታመመ ጨቅላ ህጻን ምንድን ነው የምታደግጉት ታደርጋላችሁ?
11. በምህበረሰቡ በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለሽ ታስቢያለሽ?
12. በጤና ተቀማጅ በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለሽ ታስቢያለሽ?
13. በጤና ኤክስቴንሽን በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለሽ ታስቢያለሽ?
14. በመጨረሻ ቀረ የምትለውን ነገር ንገሪኝ እስኪ?
15. እስኪ አሁን ደግሞ እስኪውን ያነሳሽልኝን ነገር ጠቅለል እድርገሽ ከልሽልኝ?

Annex 9: In-depth interview guide for delivered women [Afan Oromo version]

1. Gaaffiwan ragaalee dhunfaa
 - a. Umriin kee meeqaa?
 - b. Haalii gaa'ila kee maalii?
 - c. Sadarkaa baruumsa keetii nattii himmi mee?
 - d. Injoollee meeqa qabdaa?
 - e. Hoojiin kee maali?
 - f. Ogeesii ittiin barumsa fixee maali?
 - g. Sanyiin/qomoon kee maali?
 - h. Amantaan kee maali?
2. Mee haalii kununsa ulfaa kee nattii himi?
3. Mee ragallewan yeroo kununsa ulfaa irattii argatee nattii himi?
4. Mee waa'ee kununsa dehumsa boda kee nattii himmii?
5. Mee kuununsa fayyaa daa'immanii beektuu nattii himi?
6. Mee Dhukkubota daa'immanii beektuu natti himi?
7. Sababnii dhukkuba daa'immanii ittii dhufan maal jettee yaada?
8. Malatoolleen dhukkuboota daa'immanii maali jettee yaada?
9. Yommi mee daa'imanii dhukkubeerra jeetanni furmaata fudhachuuf kan yaadan yookkin malatoo maali yeeroo irrattii mulatuudha?
10. Daa'imman yeeroo dhukkubsatan maali gootuf mee?
11. Karaa ummattattiin walqabattee rakkoollen daa'imnii dhukkubsattee akka keellaa fayyaatii yaala akka hin arganne taassisan maali jette yaada?

12. Karaa buufatta fayyaattin walqabattee rakkoollen daa'imnii dhukkubsattee fayyaatii yaala akka hin arganne taassisan maal jette yaada?
13. Karaa extenshinii fayyaattin walqabattee rakkoollen daa'imnii dhukkubsattee akka yaala akka hin arganne taassisan maali jette yaada?
14. Dhuma irrattii waan haafee jettan mee nattii himmii?
15. Mee waan hanga amma naa kaassaa turtee mee naa kaassii?

Annex 10: Focused group discussion guide [English version]

1. Please do you know about newborn care?
2. Please would you tell me types of newborn illnesses you know?
3. Please would you tell me the causes of each newborn illness you know?
4. Please would you tell me the symptoms of each newborn illness you know?
5. Please would you tell me when you decide seeking care for sick newborns?
6. Please would you tell me what you do for sick newborns?
7. Please would you tell me barriers related to the community that affect community based service utilization for sick newborns in your area?
8. Please would you tell me barriers related to health facility that affect community based service utilization for sick newborns in your area?
9. Please would you tell me barriers related to HEWs that affect community based service utilization for sick newborns in your area?
10. Please would you tell me anything left that you want to raise regarding this issue?
11. Finally, please would you summarize what you have mentioned till now?

Annex 11: Focused group discussion guide [Amharic version]

የመወያየት ነጥቦች/መነሻ ሀሳቦች

1. ስለ ህፃናት ጤና እንክብካቤ የምታውቀውቁት እስኪ ንገሩኝ?
2. ምን አይነት የጨቅላ ህጻናት ህመሞችን ታወቃላችሁ?
3. እያንዳንዳቸው የጨቅላ ህጻናት ህመሞችን በምን ምክንያት ሊመጡ ይችላሉ ብላችሁ ታስባላችሁ?
4. የእያንዳንዳቸው ጨቅላ ህጻናት ህመሞች ምልክታቸው ምን ናቸው ብላችሁ ታስባላችሁ?
5. መቼ ነው ጨቅላ ህጻን ታመመ ተብሎ ህክምና ለመውሰድ የምታስቡት / ምን ምልክት ሲታይናቸው ነው ብላችሁ ታስባላችሁ?
6. ለታመመ ጨቅላ ህጻን ምንድን ነው የምታደግጉት ታደርጋላችሁ?
7. በምህበረሰቡ በኩል የታመመ ጨቅላ በጤና ኪላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብላችሁ ታስባላችሁ?

8. በጤና ተቀማት በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዲያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብላችሁ ታስባላችሁ?
9. በጤና ኤክስቴንሽን በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዲያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብላችሁ ታስባላችሁ?
10. በመጨረሻ ቀረ የምትሉትን ነገር ንገሩኝ እስኪ?
11. እስኪ አሁን ደግሞ እስካሁን የተወያየንባቸውን ዋና ዋና ሀሳቦች ጠቅለል እድርጋችሁ አንሱልኝ?

Annex 12: Focused group discussion guide [Afan Oromo version]

1. Mee kuununsa fayyaa daa'immanii beektuu nattii himmaa?
2. Mee Dhukkubota daa'immanii waa beektuu natti himmaa?
3. Sababnii dhukkuba daa'immanii ittii dhufuu maali jetteenii yaadduu?
4. Malatooleen dhukkuboota daa'immanii maali jettanii yaaduu?
5. Yommi mee daa'imnii dhukkubeerra jeetanni furmaata fudhachuuf kan yaadan yookan malatoo maali yeerroo irrattii mulatuudha?
6. Daa'imman yeerroo dhukkubsatan maali gootuf mee?
7. Karaa ummattattin walqabattee rakkoollen daa'imnii dhukkubsattee akka keellaa fayyaatii yaala akka hin arganne taassisan maali jettannii yaaduu?
8. Karaa buufatta fayyaattin walqabattee rakkoollen daa'imnii dhukkubsattee akka yaala akka hin arganne taassisan maali jettannii yaaduu?
9. Karaa extenshinii fayyaattin walqabattee rakkoollen daa'imnii dhukkubsattee fayyaatii yaala akka hin arganne taassisan maali jettanii yaaduu?
10. Dhuma irrattii waan haafee jettan mee nattii himaa?
11. Mee waan hanga amma naa kaassaa turtee mee naa kaassaa?

Annex 13: In-depth interview guide for kebele chairman [English version]

1. Socio-demographic characteristic related questions:-
 - a. How old are you?
 - b. Please would you tell me your educational status?
 - c. Please would you tell me your marital status?
 - d. Please would you tell me number of children you have?
 - e. Please would you tell me your occupation?
 - f. Please would you tell me your profession?
 - g. Please would you tell me your ethnicity?
 - h. Please would you tell me your religion?
2. Please do you know about newborn care?

3. Please would you tell me types of newborn illnesses you know?
4. Please would you tell me the causes of each newborn illness you know?
5. Please would you tell me the symptoms of each newborn illness you know?
6. Please would you tell me when you decide seeking care for sick newborns?
7. Please would you tell me what you do for sick newborns?
8. Please would you tell me barriers related to the community that affect community based service utilization for sick newborns in your area?
9. How is the support you gave for health extension workers to enhance service utilizations?
10. What activities have been conducted to increase availability of service utilization at health posts within your kebele?
11. Please would you tell me barriers related to health facility that affect community based service utilization for sick newborns in your area?
12. Please would you tell me barriers related to HEWs that affect community based service utilization for sick newborns in your area?
13. Please would you tell me anything left that you want to raise regarding this issue?
14. Finally, please would you summarize what you have mentioned till now?

Annex 14: In-depth interview guide for kebele chairman [Afan Oromo version]

1. Gaaffiwan ragaalee dhunfaa
 - a. Umriin kee meeqaa?
 - b. Haalii gaa'ila kee maalii?
 - c. Sadarkaa baruumsa keetii nattii himmi mee?
 - d. Injoollee meeqa qabdaa?
 - e. Hoojiin kee maali?
 - f. Ogeesii ittiin barumsa fixee maali?
 - g. Sanyiin/qomoon kee maali?
 - h. Amantaan kee maali?
2. Mee kuununsaa fayyaa daa'immanii beektuu nattii himi?
3. Mee Dhukkubota daa'immanii beektuu natti himi?
4. Sababnii dhukkuba daa'immanii ittii dhufan maal jettee yaada?
5. Malatoolleen dhukkuboota daa'immanii maali jettee yaada?
6. Yommi mee daa'immanii dhukkubeerra jeetanni furmaata fudhachuuf kan yaadan yookkin malatoo maali yeeroo irrattii mulatuudha?

7. Daa'imman yeeroo dhukkubsatan maali gootuf mee?
8. Mee haalii isiin extenshinii fayyaa ittii gargaarteen nattii himi?
9. Mee daa'imnii dhukkubsattee keellaa fayyaatii yaala argatu hojiiwan hojatan nattii himii?
10. Karaa ummattattiin walqabattee rakkoollen daa'imnii dhukkubsattee akka keellaa fayyaatii yaala akka hin arganne taassisan maali jette yaada?
11. Karaa buufatta fayyaattin walqabattee rakkoollen daa'imnii dhukkubsattee fayyaatii yaala akka hin arganne taassisan maal jette yaada?
12. Karaa extenshinii fayyaattin walqabattee rakkoollen daa'imnii dhukkubsattee akka yaala akka hin arganne taassisan maali jette yaada?
13. Dhuma irrattii waan haafee jettan mee nattii himmii?
14. Mee waan hanga amma naa kaassaa turtee mee naa kaassii?

Annex 15: In-depth interview guide for kebele chairman [Amharic version]

የመወያያ ነጥቦች/መነሻ ሀሳቦች

1. የተሳታፊው ግል መረጃ?
 - ሀ. እድሜህ ስንት ነው?
 - ለ. የት/ት ደረጃህ ስንት ነው?
 - ሐ. የትዳር ሁኔታህ ምንድን ነው?
 - መ. ስንት ልጆች አሉህ?
 - ሠ. ስራህ ምንድን ነው?
 - ረ. የት/ት ሙያህ ምንድን ነው?
 - ሰ. ብሄርህ የት ነው?
 - ሸ. ስለ ህፃናት ጤና እንክብካቤ የምታውቀውን እስኪ ንገረኝ?
3. ምን አይነት የጨቅላ ህጻናት ህመሞችን ታወቃለህ?
4. እያንዳንዳቸው የጨቅላ ህጻናት ህመሞችን በምን ምክንያት ሊመጡ ይችላሉ ብለህ ታስባለህ?
5. የእያንዳንዳቸው የጨቅላ ህጻናት ህመሞች ምልክታቸው ምን ናቸው ብለህ ታስባለህ?
6. መቼ ነው የጨቅላ ህጻን ታመመ ተብሎ ህክምና ለመውሰድ የምታስቡት / ምን ምልክት ሲታይናቸው ነው ብለህ ታስባለህ?
7. ለታመመ የጨቅላ ህጻን ምንድን ነው የምታደግጉት ታደርጋላችሁ?
8. እስኪ ጤና ኤክስቴንሽኖችን በምን መልኩ ነው የምታግዛቸው?
9. እስኪ የታመመ የጨቅላ በጤና ኬላ ህክምና እንዲያገኝ በናንተ በኩል የተሰራ ምን አለ?
10. በምህበረሰቡ በኩል የታመመ የጨቅላ በጤና ኬላ ህክምና እንዲያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ ታስባለህ?

11. በጤና ተቀማት በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ ታስባለህ?
12. በጤና ኤክስቴንሽን በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ ታስባለህ?
13. በመጨረሻ ቀረ የምትለውን ነገር ንገረኝ እስኪ?
14. እስኪ አሁን ደግሞ እስካሁን ያነሳህኝን ነገር ጠቅለል እድርገህ ከልሰልኝ?

Annex 16: In-depth interview guide for religious leader [English version]

1. Socio-demographic characteristic related questions:-
 - a. How old are you?
 - b. Please would you tell me your educational status?
 - c. Please would you tell me your marital status?
 - d. Please would you tell me number of children you have?
 - e. Please would you tell me your occupation?
 - f. Please would you tell me your profession?
 - g. Please would you tell me your ethnicity?
 - h. Please would you tell me your religion?
2. Please do you know about newborn care?
3. Please would you tell me types of newborn illnesses you know?
4. Please would you tell me the causes of each newborn illness you know in terms of your experience and religious taught?
5. Please would you tell me the symptoms of each newborn illness you know?
6. Please would you tell me when you decide seeking care for sick newborns?
7. Please would you tell me what you do for sick newborns?
 - a. How do sick newborns should be treated in religious aspects?
 - b. How is the acceptability of seeking care for sick newborns from health facilities from religious aspect?
 - c. Why communities mention religion belief as a barrier seeking care for sick newborns?
8. Please would you tell me barriers related to the community that affect community based service utilization for sick newborns in your area?
9. Please would you tell me barriers related to health facility that affect community based service utilization for sick newborns in your area?

10. Please would you tell me barriers related to HEWs that affect community based service utilization for sick newborns in your area?
11. Please would you tell me anything left that you want to raise regarding this issue?
12. Finally, please would you summarize what you have mentioned till now?

Annex 17: In-depth interview guide for religious leader [Afan Oromo version]

1. Gaaffiwan ragaalee dhunfaa
 - a. Umriin kee meeqaa?
 - b. Haalii gaa'ila kee maalii?
 - c. Sadarkaa baruumsa keetii nattii himmi mee?
 - d. Injoollee meeqa qabdaa?
 - e. Hoojiin kee maali?
 - f. Ogeesii ittiin barumsa fixee maali?
 - g. Sanyiin/qomoon kee maali?
 - h. Amantaan kee maali?
2. Mee kuununsa fayyaa daa'immanii beektuu nattii himi?
3. Mee Dhukkubota daa'immanii beektuu natti himi?
4. Sababnii dhukkuba daa'immanii ittii dhufan akka yaada keettii fi akka amanta maal jettee yaada?
5. Malatoolleen dhukkuboota daa'immanii maali jettee yaada?
6. Yommi mee daa'immanii dhukkubeerra jeetanni furmaata fudhachuuf kan yaadan yookkin malatoo maali yeeroo irrattii mulatuudha?
7. Daa'imman yeeroo dhukkubsatan maali gootuf mee?
 - a. Akka amantaatin akkamii mee daa'immanii dhukkubsattee yaalamu kan qabuu?
 - b. Mee akamii fudhatamii yaala daa'iimannii keellaa fayyaatii fi bufata fayyaatii kara amantatiin?
 - c. Maalifii ama karaa amantatiin wal-qabatee kristinaa dura daa'iimnii dhukkubsatee tokkoo manaa bahuu hin qabuu kan jedhamuu?
8. Mee daa'imnii dhukkubsattee keellaa fayyaatii yaala argatu hojiiwan hojatan nattii himii?
9. Karaa ummattattiin walqabattee rakkoollen daa'imnii dhukkubsattee akka keellaa fayyaatii yaala akka hin arganne taassisan maali jette yaada?

10. Karaa buufatta fayyaattin walqabattee rakkoollen daa'imnii dhukkubsattee fayyaatii yaala akka hin arganne taassisan maal jette yaada?
11. Karaa extenshinii fayyaattin walqabattee rakkoollen daa'imnii dhukkubsattee akka yaala akka hin arganne taassisan maali jette yaada?
12. Dhuma irrattii waan haafee jettan mee nattii himmii?
13. Mee waan hanga amma naa kaassaa turtee mee naa kaassii?

Annex 18: In-depth interview guide for religious leader [Amharic version]

የመወያያ ነጥቦች/መነሻ ሀሳቦች

1. የተሳታፊው ግል መረጃ፡-

- ሀ. እድሜህ ስንት ነው?
- ለ. የት/ት ደረጃህ ስንት ነው?
- ሐ. የትዳር ሁኔታህ ምንድን ነው?
- መ. ስንት ልጆች አሉህ?
- ሠ. ስራህ ምንድን ነው?
- ረ. የት/ት ሙያህ ምንድን ነው?
- ሰ. ብሄርህ የት ነው?
- ሸ. ስለ ህፃናት ጤና እንክብካቤ የምታውቀውን እስኪ ንገረኝ?

3. ምን አይነት የጨቅላ ህጻናት ህመሞችን ታወቃለህ?
4. እያንዳንዳቸው የጨቅላ ህጻናት ህመሞችን በምን ምክንያት ሊመጡ ይችላሉ ብለህ ታስባለህ እንወራስህም ወይም ከኃይማኖት አስተምሮ አንፃር?
5. የእያንዳንዳቸው የጨቅላ ህጻናት ህመሞች ምልክታቸው ምን ናቸው ብለህ ታስባለህ?
6. መቼ ነው የጨቅላ ህጻን ታመመ ተብሎ ህክምና ለመውሰድ የምታስቡት / ምን ምልክት ሲታይናቸው ነው ብለህ ታስባለህ?
7. ለታመመ የጨቅላ ህጻን ምንድን ነው የምታደግጉት ታደርጋላችሁ?
 - ሀ. እንደ ኃይማኖት አስተምህሮ እንዴት ነው አሁን የታመመ የጨቅላ መታከም ያለበት?
 - ለ. እስኪ እንዴት ነው በጤና ተቆም የሚሰጠው የጨቅላ ህፃናት ህክምና ተቀባይነት እንደኃይማኖት አስተምህሮ?
 - ሐ. እስኪ ለምንድን ነው ህዝቡ የጨቅላ ህፃን ከክርስትና በፊት ከቤት መቅጣት የለበትም የሚባለውና ህክምና እንዳያገኙ የሚደደረገው?
8. እስኪ የታመመ የጨቅላ በጤና ኬላ ህክምና እንዲያገኝ በናንተ በኩል የተሰራ ምን አለ?
9. በምህበረሰቡ በኩል የታመመ የጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ ታስባለህ?
10. በጤና ተቀማት በኩል የታመመ የጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ ታስባለህ?

11. በጤና ኤክስቴንሽን በኩል የታመመ ጨቅላ በጤና ኬላ ህክምና እንዳያገኝ የሚያደርጉ እንቅፋቶች ምን ናቸው ብለህ ታስባለህ?
12. በመጨረሻ ቀረ የምትለውን ነገር ንገረኝ እስኪ?
13. እስኪ አሁን ደግሞ እስካሁን ያነሳህኝን ነገር ጠቅለል እድርገህ ከልሰልኝ?