DEVELOPMENT OF GUIDELINES TO IMPROVE THE UPTAKE AND QUALITY OF POSTNATAL CARE IN ETHIOPIA

by

ADEME TSEGAYE ADGO

Submitted in accordance with the requirements

for the degree of

DOCTOR OF LITERATURE AND PHILOSOPHY

in the subject

HEALTH STUDIES

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF LM MODIBA

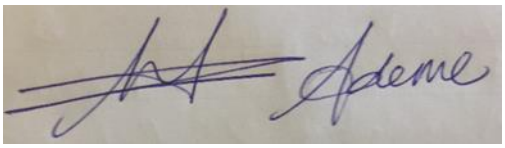
December 2019

Student number: 58540075

DECLARATION

I declare that **DEVELOPMENT OF GUIDELINES TO IMPROVE THE UPTAKE AND QUALITY OF POST NATAL CARE IN ETHIOPIA** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.

SIGNATURE



DATE

1 December 2019

DEVELOPMENT OF GUIDELINES TO IMPROVE THE UPTAKE AND QUALITY OF POST NATAL CARE IN ETHIOPIA

STUDENT NUMBER	:	58540075
STUDENT	:	ADEME TSEGAYE ADGO
DEGREE	:	DOCTOR OF LITERATURE AND PHILOSOPHY
DEPARTMENT	:	HEALTH STUDIES
SUPERVISOR	:	PROFESSOR LM MODIBA

ABSTRACT

Post-natal care is a care given to the mother and the newborn during post-natal period. This period is crucial to save the lives of the mother and the newborn. Despite its importance, the utilisation of this service is very low in Ethiopia.

This study was conducted to establish the views and experiences of women and health care workers on post-natal care services and determine the factors influencing its utilisation with the ultimate purpose of developing guidelines to improve uptake and quality of the services in South West Shoa Zone of Oromia Region, Ethiopia.

The objectives of the study were to explore and describe the women's views and experiences on utilisation of post-natal care service. Furthermore, the study sought to explore and describe health care workers views and experiences on provision of the services and to assess the factors facilitating or hindering to the utilisation of it. Ultimately, the study had intended to develop guidelines that would contribute towards improving the uptake and quality of the post-natal care services.

The study used a qualitative descriptive and explorative research design to address the research questions. Qualitative data were collected from 19 women who gave birth in the past six months and from 24 health care workers providing post-natal care services (health care workers and health extension workers) and coordinating the overall maternal, neonatal and child health services in the study area (Zone and district health officials;

primary health care units heads). The study used in-depth interview guides to collect data from the aforementioned study participants. Inductive thematic analysis was performed on the verbatim transcriptions using the Atlas ti version 8 qualitative data analysis software.

Overall, the emerged themes from the analysis are categorised into women's views and experiences on utilisation of PNC services, views and experiences of health care workers on PNC and factors facilitating and hindering the utilisation of PNC services.

The study identified wide range of socio-cultural, knowledge and attitude related, physical, health facility related and health care workers related factors affecting the utilisation of post-natal care services. Consequently, after a systemic review of literature and stakeholders consultation the researcher used the findings of the study to develop guidelines to improve the uptake and quality of post-natal care services. The developed guidelines were also validated by maternal, neonatal and child health service providers and program leaders and the researcher strongly recommend the use of the developed guidelines that would improve the uptake and quality of post-natal care services.

Keywords

Experiences; factors; guidelines; perceptions; post-natal care; views

ACKNOWLEDGEMENTS

I would like to acknowledge the following organisations and individuals for their valuable contribution towards the realisation this research work:

- My deepest and sincere acknowledgment goes to my advisor, Professor LM Modiba, who has been encouraging and following up on me and provided me unreserved guidance from the inception to completion of this research work.

- My desire to pursue my academic excellence and this research work would not have been realised without the extraordinary financial support I received from my organisation – Doctors with Africa CUAMM.

- My acknowledgement goes to Mrs Serena Menozzi and Don Dante Carraro for allowing me to study while working for Doctors with Africa CUAMM. My acknowledgement also goes to Mr Worku Nigussa, Mr Desalegn Abebe and the Wolisso St. Luke Hospital Public Health team for assisting me during the data collection process.

- I would like to thank the University of South Africa and Oromia Region Health Bureau for offering me the ethical clearances to conduct this study.

- I would also like to acknowledge the head of South West Shoa Zone Health Office, the Goro and Wolisso Urban woreda health office heads, primary health care unit heads, health care providers, health extension workers, and MMCH coordinators of Goro and Wolisso Urban districts for being cooperative during the whole process of data collection.

DEDICATIONS

I dedicate this research report to my late mother Mulu Abate. The seed she planted, against all the odds and weeds, has grown up triumphantly and becomes abundantly fruitful. I also dedicate this work to my beloved wife Atsedemariam Aschenaki, my son Yonatan and my daughter Etsub.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ANC	Antenatal Care
CPAP	Continuous Positive Airway Pressure
CRC	Compassionate Respectful Caring
DHS	Demographic Health Survey
EDD	Expected Date of Delivery
EDHS	Ethiopian Demographic Health Survey
EMoC	Emergency Obstetric Care
EPI	Expanded Program on Immunisation
FMOH	Federal Ministry of Health
HBM	Health Belief Model
HCW	Health Care Workers
HEP	Health Extension Program
HEW	Health Extension Workers
HP	Health Post
ICCM	Integrated Community Case Management
IEC	Information Education Communication
KAP	Knowledge Attitude Practice
KMC	Kangaroo Mother Care
MNCH	Maternal Neonatal Children Health
NGO	Non-Governmental Organisation
PHCU	Primary Health Care Unit
PLA	Participatory Learning and Action
PNC	Post-natal care
PPH	Post partal Haemorrhage
TTC	Tetracycline
UN	United Nations
UNDP	United Nations Development Program
UNFPA	The United Nations Population Fund

UNICEF	The United Nations Children's Fund
UNISA	University of South Africa
USAID	United States Aid for International Development
WBG	World Bank Group
WHO	World Health Organisation

CHAPTER 1

OVERVIEW OF THE RESEARCH

1.1 INTRODUCTION

Post-natal care (PNC) is a care given to the mother and the newborn during the postnatal period, which starts immediately after birth of the placenta and membranes and continues up to six weeks of delivery. It is expected that by six weeks after delivery all the systems in women's body will return to its non-pregnancy state (Buckley 2006 cited in Diane, Margaret & Anna 2011:649). The postnatal period is defined as a period up to six to eight weeks following delivery and the physiologic changes during pregnancy is expected to return to the normal physiology one to two weeks following delivery (Charles, Frank, Barbara, William, Douglas & Roger 2010:125). PNC is also defined by WHO as a care given to a woman and the newborn beginning immediately after birth and extends to six weeks post-delivery (WHO 2010:12).

WHO recommends a woman who gave birth in a health facility should stay at the facility for the first 24 hours and receive PNC services and thereafter, receive at least 3 subsequent PNC services at the third day, between six-14 days and at six weeks. If the birth has happened at home, the woman should receive the first PNC service in the first 24 hours (WHO 2013:130). Receiving PNC care services has a huge impact in terms of reduction of maternal and neonatal mortality and also is a good opportunity to promote a healthy lifestyle and impart health messages. These include exclusive breastfeeding, nutrition for the mother and the newborn, immunisation, hygienic preparation of foods, early signs and symptoms of diseases affecting the health of the mother and the newborn, etc. (Central Statistical Agency of Ethiopia & ICF International 2016:139).

Despite its huge benefits, the PNC service utilisation remains very low in Ethiopia. The health care workers and client's views and experiences on PNC services provided at the facility and home level are not clearly known. This study has aimed to describe and explore the views and experiences of health care workers and women on PNC services

and develop guidelines that will improve the utilisation and quality of PNC services delivered at the facility and home levels. This chapter briefly describes the background to the problem, statement of the problem, the purpose and objectives, significance of the study, definition of terms, theoretical underpinnings, and overview of the methodology, ethical considerations, and structure of the thesis.

1.2 BACKGROUND INFORMATION ABOUT THE RESEARCH PROBLEM

Globally in 2015 alone 303,000 women and 2,682,000 newborns died secondary to pregnancy related complications giving rise to 216 maternal deaths per 100,000 live births and 19 newborn deaths per 1,000 live births. Of all the maternal and newborn deaths occurred in 2015, 201,000 (66.3%) of the maternal deaths and 1,027,000 (38.3%) of the newborn deaths occurred in sub-Saharan African countries (WHO 2015a:17; UNICEF, WHO, WB & UN 2015:6). In Ethiopia, according to the Ethiopian Demographic Health Survey (EDHS) report, the maternal mortality ratio in 2016 was estimated to be 412 per 100,000 live birth and the neonatal mortality was estimated to be 29 per 1,000 live birth (Central Statistical Agency of Ethiopia & ICF International 2016:249). Of the first month neonatal deaths, 88% of them occur in Africa. Infection, intrapartum related conditions ("birth asphyxia") and preterm births accounts for the majority of the deaths which can be prevented by easy interventions such as warmth, feeding, hygiene and early treatment of infection (Mary, Kate, Robert, et al. 2010:4).

The postnatal period is a crucial period to end the preventable maternal and neonatal mortality and morbidity. This period is also an opportunity to promote healthy behaviours that can have effects on the mother, the newborn and the children. The WHO technical consultation document on PNC reported that about 50% of maternal death and 40% of neonatal death occurs in the first 24 hours of delivery. The risk of deaths decreases afterwards but do not diminish at all. The document also indicated some 3% to 4% of mothers lost their babies in first few days of delivery (WHO, 2010:13). According to the WHO (2013:16), the PNC service is recommended to be given both at the facility and community level. If the birth has happened at the health facility, the mother and the

newborn should receive PNC for at least 24 hours in the facility. If the birth hat taken place at home, the first post-natal contact should be within 24 hours after birth. In addition, at least three postnatal contact are recommended for all mothers and new-born on day 3, between day 7-14 after birth and at six weeks after birth.

During each post-natal visit, the newborn should be assessed if he/she stopped feeding, for history of convulsion, fast breathing, severe chest in drawing, no spontaneous movement, fever, low body temperature and for any jaundice in the first 24 hours of life. The mother should be assessed for any sign and symptoms of post-partal haemorrhage, for signs and symptoms of pre-eclampsia/eclampsia, for sign and symptom of infection and or signs and symptoms of thromboembolism. In addition, the women should be counselled on nutrition, hygienic care, birth spacing, and use of condoms. In malaria epidemic area, the women should be assessed on the use of insecticide impregnated bed nets. In addition, the women have to be consulted on the importance of taking gentle exercise (WHO 2013:20).

In Ethiopia, there have been a huge commitment from the government in the development of favourable policies, guidelines and strategies to improve the coverage and quality of maternal, neonatal and child health services thereby reduce the maternal and neonatal mortalities. The PNC service is being provided at the hospitals, health centres and health posts level by health care workers and at home to home level by the health extension workers. This wide coverage of health services has resulted in improvement of some of maternal, neonatal and child health services. In the past decade the Antenatal care four plus service coverage has increased from 19% to 32%, the skilled birth attendance has increased from 10% to 26%. However, the PNC service remain very low at 16.5% nationally and in the region where this study is conducted, its coverage is 9 % (Central Statistical Agency of Ethiopia & ICF International 2016:139). There have been studies in different countries to assess the factors related with low PNC utilisation.

Studies conducted in different countries identified various factors associated with utilisation of ANC and PNC services. A study conducted in Indonesia to assess the reason

why some women attend ANC or PNC services identified that women received the services to ensure the safe health of both mother and infant. Financial inabilities emerged as the major issue among women who did not attend antenatal and postnatal services. Limited availability of services, distance of the facilities from the house, poor road and transportation facilities were also mentioned as an obstacle from accessing anti-natal and PNC services (Christiana, Cynthia, Peter & Michael 2010:6). A similar study conducted in Nigeria to assess the determinants of PNC services among women showed that 63% of the study participants did not utilise PNC services and ANC, distance from the health facility, educational background, place of delivery, region and wealth status were significantly associated with non-utilisation of PNC services (Oluwaseyi & Latifat 2016:6). A study conducted in Kenya to identify the determinants of PNC use indicated that 47% of the women received PNC services. Age at delivery of the last child, 4+ ANC visits, urban residence, and skilled delivery were significantly associated with PNC services use. However, lack of education and unskilled delivery were associated with low use of PNC services (Akunga, Menya & Kabue 2014:1455).

A study conducted in Ethiopia Amhara Region to assess the knowledge, attitude and practices of women towards PNC services revealed that 84.4% of the women had awareness about PNC services. However, only 66.8% of them actually accessed the services mentioning distance from the facilities, lack of time, and lack of guardians at home to take care of children as a major factor for not visiting the facilities for PNC services (Fikrte, Walelegn, Fekadu & Manaye 2014:2343). A study conducted in the Southern part of Ethiopia also showed only 37.2% of the women accessed postnatal care. However, this study indirectly assessed the PNC utilisation through the completion of children vaccination services. The study identified that literacy, exposure to media and low parity were associated with utilisation of PNC services (Regassa 2011:393).

Except few quantitative studies conducted on KAP and associated factors for utilisation of PNC services, there are no studies aimed at understanding the views and experiences of health care workers and women on PNC services. PNC is also the most neglected area in the health care delivery system despite being very important time for the provision

of interventions that are vital to the health of both the mother and the newborn. In addition, there appears to be no guideline in place that will help improve the utilisation of PNC services. Therefore, this study explored the views and experiences of health care workers and women who utilised PNC services with the overall aim of developing guidelines that will further increase the service utilisation of PNC services offered at the facility level.

This study is a qualitative study aimed at developing guidelines to improve the utilisation and quality of PNC services in Ethiopia through describing and exploring the views and experiences of the women and the health care workers on utilising and providing PNC services. The results were utilised by policy makers in designing and implementing PNC services.

1.3 RESEARCH PROBLEM

Although more emphasis has been given towards improving the MNCH service in Ethiopia, the utilisation of the PNC services has not shown significant improvement. The Ethiopian Health and Demographic Survey key indicator report showed that only 16.5% of women has utilised the services at national level and only 9% has received this service in the first two days of delivery in the region where this study was implemented. This figure was 6.7% at national level showing not much improvement has been registered in terms of PNC service utilisation (Central Statistical Agency of Ethiopia & ICF International 2016:139). And this low utilisation of PNC services have a devastating effect to health of the mother and the new-born. According to WHO about 50% of maternal death and 40% of neonatal deaths occurs in the first 24 hours of delivery. The risk of death decrease afterwards but don't diminish at all. Some 3-4% of mothers lose their babies in the first few days of delivery (WHO 2010:13)

PNC service seems to be neglected in the health care delivery system and not much is known about the views and experiences of women on PNC services and the experiences and views of health care workers in providing PNC services in Ethiopia. Furthermore,

there appears to be no specific guidelines that would be used to improve the PNC service utilisation.

1.4 RATIONALE OF THE STUDY

Various studies conducted in different countries identified wide range of factors affecting the utilisation and quality of PNC services. Most of the studies conducted in Ethiopia to assess factors associated with PNC service utilisation are quantitative studies and did not explore and describe the issues surrounding PNC service utilisation in comprehensive way. This study arouse out of the need of exploring and describing the views and experiences of women and health care workers about PNC services and there by developing guidelines that will improve the uptake and quality of PNC services.

1.5 AIM OF THE STUDY

1.5.1 Research purpose

The main purpose of this study is to establish the views and experiences of women and health care workers on PNC services and determine the factors influencing PNC service utilisation and develop possible guidelines to improve the service uptake and the quality of services in Ethiopia.

1.5.2 Research objectives

- To explore and describe the women's views and experiences on utilisation of PNC service.
- To explore and describe health care workers views and experiences on provision of PNC services.
- To explore and describe the barriers that affect the utilisation of PNC services.
- To assess the factors facilitating the utilisation of PNC services.
- To develop guidelines that would contribute towards increasing the utilisation and improve quality of PNC services.

1.5.3 Research questions

- What are the experiences and views of women in the utilisation of PNC services?
- What are the experiences and views of health care workers in provision of PNC services?
- What are the factors that contribute the utilisation of PNC services?
- What are the barriers to utilise PNC services?
- What are the possible guidelines and interventions to improve the PNC service utilisation?

1.6 SIGNIFICANCE OF THE STUDY

Maternal mortality remained as a challenge for Ethiopia. The maternal mortality ratio stayed high at 412 deaths per 100,000 live births in 2016 and 676 per 100,000 live births in 2011 (Central Statistical Agency of Ethiopia & ICF International 2016:252). The neonatal mortality rate has not shown decrement as well comparing the 2011 and 2016 EDHS findings. Although studies suggest the utilisation of postnatal services can reduce maternal and neonatal mortalities, very few women utilise the services in Ethiopia. This study explores and describes the views and experiences of women and health care worker to confirm the existence of factors affecting PNC services which were identified in other settings and also identify other emerging factors that may affect the quality and utilisation of PNC services.

This study has established the views and experiences of women and health care workers on PNC services and will come up with guidelines that would improve the PNC service utilisation. The policy makers at higher level also utilised the guidelines proposed in the development of policies. The study also gave an opportunity for the health care workers to reflect on their experiences and views on the provision of PNC services and will help them suggest on better ways of delivering the service. Furthermore, the result of this study has contributed to the existing body of knowledge to better understand the factors

associated with PNC service utilisation and contribute its part in increasing the utilisation of PNC services.

1.7 DEFINITION OF TERMS

1.7.1 Conceptual definition

1.7.1.1 CLIENTS

The Oxford University Press (2010:1112) defines a client as a person who is receiving medical treatment. In this study, the client refers to women who received PNC services in the facility.

1.7.1.2 EXPERIENCE

The Oxford Advanced Learners Dictionary (2010:534) defines experience as things that have happened to people and influence the way they think and behave. In this study, experience refers to women's and health care workers experiences on utilising and provision of PNC care in the post-natal period.

1.7.1.3 HEALTH CARE WORKERS

Del poz, Kinfu, Drager and Kunjumen (2007:1) define health care workers as all people engaged in the promotion, protection or improvement of the health of population. In this study, health care workers include health care workers providing PNC services, midwives, head of PHCU units, health extension workers, and health care workers coordinating MNCH services in the study districts.

1.7.1.4 POSTNATAL CARE

The WHO technical consultation on postpartum and postnatal care (2010:12) defines postnatal care as a care given to the mother and the newborn beginning from immediately after the births of the baby and extends up to six weeks (42 days) after birth.

1.7.1.5 GUIDELINES

A guideline is a set of recommendations on local interventions that can help prevent diseases or improve health. In the context of this study, guidelines are proposed recommendations to improve the utilisation and quality of PNC services (Muller, Bezuidenhout & Jooste 2011:569).

1.8 THEORETICAL FOUNDATIONS OF THE STUDY

1.8.1 Research paradigm

The constructivism paradigm was employed in this study to explore and describe the views and experiences of women on PNC services and the views and experiences of health care workers providing and coordinating PNC services. This paradigm is employed when the researcher aim is to explore the views and experiences of the study participants in a certain kinds of phenomena in this case the views and experiences on PNC services. The paradigm allows the researcher to explore more to understand the meaning given to certain kinds of experiences by asking more broad questions and probing in the course of the discussion with the study subjects (Creswell & Creswell 2018:46).

1.8.2 Theoretical framework

The health belief model (HBM) was used as a theoretical framework to guide this study and would support the findings of the study. In the HBM, four constructs can individually or in combination affect the health seeking behaviour of an individual. These four constructs are perceived seriousness, perceived susceptibility, perceived benefits, and perceived barriers. Other additional constructs have been also added in the model including cues to action, modifying factors and self-efficacy Glanz, Rimer & Viswanath (2015:75).

The HBM is organised into three set of components containing the constructs described above explaining the factors affecting the health seeking behaviour of an individual. For

this study, the HBM explains the factors that affect the utilisation of PNC services. The three set of components and the constructs including in each component are:

Modifying factors are individual characteristics that influence personal perceptions and modify the four constructs includes, but not limited to:

- Demographic factors such as age, gender, ethnicity;
- Socio-demographic variables such as personality, social factors, economic factors; and
- Women's knowledge about the benefits of utilising and risks of not utilising PNC service.

Individual perceptions which include perceived susceptibility and perceived severity.

Likelihood of taking action: perceived benefits, perceived barriers

Perceived seriousness

The perception of seriousness encompasses an individual's belief about the seriousness of complications that may arise during PNC period on her and her newborn. This perception depends on the women's knowledge and information about post-natal complications. It may also come from the belief the woman has about the consequence of postnatal complication on her and the newborn life. Both women who utilised and did not utilise PNC service were interviewed and probed to assess their perception of seriousness of post-natal complications.

Perceived susceptibility

Perceived susceptibility may include the perception of risk of encountering a certain health problem. In this study, the women perception of susceptibility of herself and the newborn for any complications, which may arise after delivery, is included in this construct. Perception of severity/seriousness includes the perception of morbidities and mortalities secondary to compilations which may arise during the postnatal period is of complications which may happen to the mother or the newborn in the PNC period also increases the likelihood of utilising PNC services.

Perceived benefits

This construct deals with the perception of an individual towards the values or usefulness of a new behaviour in minimising the risks of getting seriously ill secondary to complications that may arise in the PNC period. The assumption is the woman may utilise PNC if she believes that PNC visit will decrease the likelihood of getting seriously ill secondary to pregnancy complications that may occur on her and her newborn. The perceived benefits of PNC services utilisation were assessed by interviewing both women who utilised and did not utilise the PNC services. The health care workers were interviewed to get their insight about the women's perception on the benefits of utilising PNC services.

Perceived barriers

Perceived barriers include all obstacles that prevent an individual from adapting a new behaviour. This construct is the most significant in determining behavioural change. For an individual to take action or adapt a new behaviour, the benefit of the new behaviour should outweigh the consequence of continuing with the old behaviour.

For this study, the perceived barriers for PNC service use, the perceived benefits of utilising PNC service and the perception of the women about the complications that may arise following delivery to herself and the newborn were assessed. In addition, the health care workers were interviewed for identifying the possible obstacles for not using PNC services.

Cues to action

Cues to action are factors that influence an individual to take action or adapt a certain kind of behaviour. These factors include the following but not limited to events, people or things. These factors may be presented to an individual in the form of report, news, advice, reminder, etc. In this study, the cues for PNC service utilisation was assessed by interviewing women who utilised PNC service to identify possible factors that may contribute for PNC service utilisation.

Self-efficacy

Self-efficacy is a belief that somebody has the ability to do something. The assumption is if somebody does not have the belief to do something, he/she will not try to do it. In this particular study, self-efficacy is related with the ability of women to visit the health facilities for PNC services. This is going to be assessed by probing the woman to assess if she has the belief that she can visit the health facilities for PNC services whenever she needed and or she can visit the health facilities for PNC services following the recommended PNC visits check-up schedule.

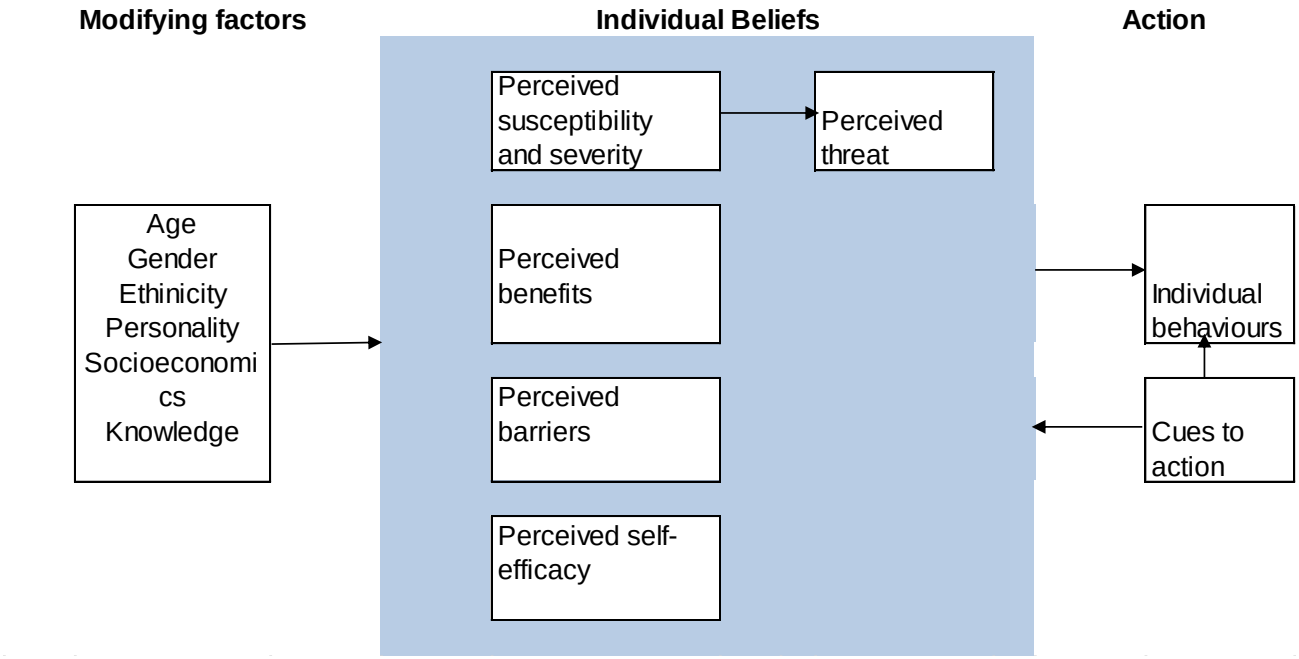


Figure1.1: The "Health Belief Model" as predictor of preventive health behaviour

1.9 RESEARCH DESIGN AND METHOD

Kumar (2014:122) defines a research design as a road map that the researcher follows to answer the research questions. Research design is also described as a plan of conducting the research to answer the research questions. It starts with formulation of the research question and goes to the analysis of the data and answering the research questions. Furthermore, the research design can follow either quantitative or qualitative research paradigms. The former one focuses on making observations, developing hypothesis, making predictions and testing the predictions using test statistics. The later one gives deeper understanding on the views and experiences of the study participants on different phenomenon.

This study utilised Phenomenology as a research design to answer the research questions. Objective 1 of this study was used to explore and describe the views and experiences of women who utilised and did not utilise PNC care services. Objective 2 of the study also utilised qualitative methods to explore and describe the views and experiences of health care workers on PNC service delivery.

The findings of the study was used to develop guidelines to improve the utilisation and quality of PNC services based on the study findings. Phenomenology is described as a design used to describe and explore a phenomenon under investigation (Creswell & Creswell 2018:109).

Setting

This study was conducted in South West Shoa Zone of Oromia Region of Ethiopia. Oromia Region is the most populous region in Ethiopia with 37.4 percent of the Ethiopian population. According to the projection made on the 2007 Ethiopian census, the total population of the Oromia region stood at 34,575,008. The Region has 18 administrative zones and 310 administrative districts.

South West Shoa zone is one of the 18 administrative zones of the regions with a total population of 1,173,363 million. The zone has 11 administrative woredas and one town administrations. The zonal town, Wolisso is located at 120 km south of Addis Ababa. In total, the zone has one zonal hospital, one NGO hospital, 48 health centres, and more than 200 health posts.

Goro and Wolisso Urban districts are among the 12 districts found in the zone. Goro woreda town is located at 15 km from the zonal town and Wolisso Urban district is located at the centre of the central part of the zone. 58,301 and 54,986 people are living in Goro and Wolisso Urban districts, respectively.

There are 4 health centres and 21 health posts in Goro District. In Wolisso Urban District, there are two health centres serving the residents. All of the health centres were included in the study. In addition, one health post was selected from each health centre and included in the study. Further details on the study setting are presented on chapter 3.

Design

According to Yin (2015:70), Phenomenological design encompasses studying the meaning of lived experiences in real world conditions. It is useful in assessing the views and experiences of the study participants on the study phenomenon under investigation. Particularly, it is important to capture the perspectives of the participant on the study subject. This design is also described as useful to analyse the social, institutional and environmental conditions in which the participants' day-to-day life taken place. In light of this, this research employed a Phenomenological study design to describe and explore the views and experiences of women on PNC service utilisation and assess the health care workers' views and experiences in the provision these services.

Population, sampling techniques and samples

All women who gave birth in the past one year prior to the study period and all health care workers providing and or coordinating PNC services were the study population. The study employed a purposive sampling technique to select the study subjects. All women who utilised PNC services in the catchment areas of the health centres was identified from the PNC register of the health centre and a purposive selection was used to interview women who were willing to participate on the study. The health extension workers working in the catchment area was used to identify, contact and appoint the women for the interview. In addition, the health extension workers also identified those women who gave birth in the past six months but did not utilise PNC services.

The health care workers working in the selected districts who were providing PNC services and those health care workers coordinating the MNCH services in the district and the zone was selected purposively to get their practical experiences on PNC services. Chapter 4 contains more information on population, sampling techniques and samples.

Data collection

Jennifer, Susan and Suzane (2017:406) assert that to gain deeper views and experiences of study participants, in-depth interview is the preferred method over other methods of data collection. In addition, it is also described as a flexible data collection method and the response rate using this method is higher than using other methods of data collection. Accordingly, this research collected data using semi-structured interviews from both the women and the health care workers to gather as much as data as possible on the views and experiences of utilising PNC services for the women and providing PNC services for the health care workers. The health care workers interviewed included PNC service providers, MNCH service coordinators at the district and zone levels. The data collection tool utilised open-ended questions to gather as mush data as possible. All interviews were audiotaped. The researcher also took down field notes on observations during data collection. Chapter 4 outlines a detailed description of the data collection procedure.

Data analysis

All interviews were transcribed simultaneously with the data collection exercises. All audiotapes were transcribed by two transcriptionists after which they were reviewed by the researcher for discrepancies. In addition, an independent reviewer also reviewed sample of transcription against the audio tapes independently for consistency. Once the transcription was done, the researcher went through the transcripts and the field notes to make sure that both transcriptions were consistent and got ideas on the possible codes and categories to emerge. Codes and categories were developed from the transcriptions and the field notes and themes were emerged from the developed codes and categories. An independent reviewer also reviewed the scripts, codes, themes, and categories for consistency. Chapter 3 contains detailed accounts on the methodology.

Development of guidelines to improve utilisation and quality of PNC services

On this phase of the study, the findings of the study and other relevant experiences and information gathered from literature reviews was used to develop strategies to improve the utilisation and quality of PNC services.

The draft guidelines developed were shared with experts working on MNCH services at district, zonal and regional levels. Consultation was held with the key informants for their reviews and feedbacks. Health care workers providing PNC services also gave feedbacks on the guidelines developed. Finally, the guidelines were shared with public health experts to check for their comprehensiveness, their feasibility and applicability. Detailed accounts of the process to be followed on this phase are presented in Chapter 3.

Trustworthiness

The rigour of qualitative study depends on its trustworthiness which ensures the research work and its results can be trusted. A study's trustworthiness is ensured by its credibility, transferability, and dependability and confirmatory of the study findings. These four criteria for trustworthiness represent its likeness in positivists' criteria of internal validity, reliability, objectivity and external validity of the research (Denise & Cheryl 2010:492).

Credibility

Credibility of a research findings focuses on the confidence in the truthfulness of the data collected, its interpretation and its accuracy in representing the data accurately. The rigour of the method, the credibility of the research and a general philosophical belief in the value of qualitative inquiry contribute to the credibility of the study and the findings.

To ensure credibility of this research, the data were collected from various sources including women who utilised PNC services, women who did not utilise PNC services, health care workers providing PNC services, and health care workers coordinating PNC services were included in the study. In addition, enough time was given for the data collection exercise to get as much information as possible. The study objective, the findings, the guidelines developed was shared with colleagues, health care workers, MNCH service coordinators, and public health experts to get their feedbacks and their inputs on the overall process of the research.

Transferability

Transferability is the extent to which the study findings of the research can be applied to other groups of population. The researcher provided detailed accounts of the methodology followed on this study to make sure that readers get all information to determine if the research work is transferable or not.

Dependability

Dependability refers to the stability of data overtime and over conditions. Dependability also assesses whether if it is possible to get a similar explanation for the study under investigation in a similar condition, procedures and tools applied. The study ensured dependability by clearly articulating the methods, keeping the raw data for interested researchers to cross check, do similar kinds of study, and verify the findings.

Confirmability

Confirmability ensures that the research conclusions and claims match the actual data collected. This study promoted confirmability through inquiry audit. As it is mentioned on the data analysis section of this chapter, an independent reviewer reviewed sample of the transcripts against the audio records. Independent reviewers also reviewed the transcripts, the codes, the categories, and themes developed.

Ethical consideration

Ethical clearance was obtained from University of South Africa (Unisa) Department of Health Studies' Higher Degrees Committee and Oromia Regional Health Bureau Research Department to conduct the current study. The South West Shoa Zone Health Department also wrote a support letter to get access to the health centres and health posts. To ensure the research ethics, the respondents were informed about the purpose, objective, risks, benefits, and the overall implications of participating in the research. Participants had a full right to decline or stop the interview process in any of the data collection process. A written consent was also obtained from the participants and the institutions before collecting the data. Ethical clearance was obtained from the Oromia Regional Health Bureau and the Unisa Departmental Higher Degrees Committee. Individual personal identifiers were not collected to ensure anonymity of data and confidentiality was maintained at highest level. The current study complies with moral principles of respect for persons, avoidance of harm, beneficence, and justice. Details of these are presented in Chapter 4.

1.10 SCOPE OF THE STUDY

The scope of this study is to explore and describe the experiences and views of women's and health care workers on PNC services and develop guidelines that would contribute towards the improvement of utilisation and quality of PNC services. The study was conducted in two districts of South West Shoa Zone of Oromia Region, namely in Goro and Wolisso Urban districts. This research work provided immense data required to explore and describe the women's and the health care workers experiences and views on PNC service provision, identify possible factors contributing to low utilisation of services and came up with guidelines that would improve the utilisation and quality of PNC services in Ethiopia.

1.11 STRUCTURE OF THE DISSERTATION

This thesis report is presented in eight chapters, and they are described as follows:

Chapter 1: Orientation of the study

The chapter gives an overview of the whole study. It discusses the background, research problem, statement of the research problem, aim, study objectives, significance of the study, the foundation of the study, the research design and method, ethical considerations, and the scope and layout of the thesis.

Chapter 2: The theoretical framework of the study

This chapter described the theoretical framework of the study which guided the overall research process.

Chapter 3: Literature review

This chapter reviews literature on issues pertaining to PNC. The chapter discusses about the maternal and neonatal mortality trends of the country, the provision of PNC services in Ethiopia, global guidelines and strategies in the provision of PNC services and its benefits towards decreasing maternal and neonatal mortalities, summary of studies conducted on PNC services, the justification of using health belief model (HBM).

Chapter 4: Research design and method

The chapter presents the study's research paradigm and research design, data collection approach and methods, data collection instruments and data analysis, trustworthiness and finally ethical considerations.

Chapter 5: Analysis, presentation and description of the research findings

The chapter discussed the analysis of data and description of the research findings.

Chapter 6: Discussion of the findings

This chapter discusses the findings of the study against relevant literatures

Chapter 7: Guidelines for the improvement of uptake and quality of PNC services

The chapter discusses guidelines for the improvement of quality and uptake of PNC services in Ethiopian public health facilities.

Chapter 8: Conclusions and recommendations

The chapter discusses the findings of the research. It also provides a set of recommendations on how to improve the uptake and quality of PNC.

1.12 CONCLUSION

PNC is one of the services given to the mother and the newborn during the postnatal period. Receiving care and support during this period can reduce the mortalities and morbidities that may arise from pregnancy related complications. However, the PNC service utilisation in Ethiopia is very low and not enough is known about the views and experiences of mothers who utilised and did not utilise PNC services. The health care providers' views and experiences on PNC is not also known. This thesis will explore the views and experiences of mothers and health care workers on PNC and develop strategies that would improve the service quality and utilisation.

The current chapter outlines the study introduction, background, and statement of the problem, purpose of the research, research objectives, research questions, significance of the study, definition of terms, theoretical foundation of the study, research design and methodology, data analysis, ethical consideration, scope of the study and finally it shows the overall structure of the thesis.

CHAPTER 2

THE THEORETICAL FRAMEWORK OF THE STUDY

2.1 DESCRIPTION OF THE THEORETICAL FRAMEWORK

Theoretical framework in a research helps to frame, conceptualise and guide the overall process of the research undertaking (Anfara & Mertz 2015:22). Sharon and Matthew (2012:29) describe theoretical framework as a conceptual structure which directs and guides the research process. Polit and Beck (2014:182) also describe frameworks as a guide to conceptualise the study, guide the research questions and the methods of data collection. This study utilised the HBM as a guide in the quest of establishing the views and experiences of women and health care workers on PNC services.

As described by Glanz et al. (2015:75), the HBM was conceptualised by Hochbaum, Kegeles, Leventhal, and Rosenstock to better understand the utilisation of the 1950s TB screening services offered in the united stated of America. The services were provided for free in the people's neighbourhood but actually not utilised by many of them. The behavioural scientists by then were concerned about this and developed the HBM to better understand why and under what conditions people took action to prevent, detect and treat diseases.

Since then, the HBM has been used extensively in health promotion and health communication interventions. The basic concept of the HBM lies with the fact that an individual's health behaviour depends on perception about the seriousness of the disease and the perception about availability of means of preventing the disease. This perception can be affected by different factors, including knowledge, attitude, beliefs, experience, skills, culture, and religion (Hayden 2014:65).

The HBM has been used to tailor messages linked with the constructs of the HBM that influence or cause changes in the health behaviour of individuals. The model has also been utilised to predict behaviours associated with positive health outcomes.

2.2 COMPONENT OF THE HEALTH BELIEF MODEL

The HBM consists of constructs that can potentially predict if an individual is likely to take actions to prevent him/her from acquiring a certain kinds of disease conditions or illnesses. These constructs are perceived susceptibility, perceived severity, perceived benefits, and barriers to engaging in a behaviour, cues to action, and self-efficacy. These constructs are organised into three set of components: modifying factors, individual perception, and likelihood of action (Glanz et al. 2015:100).

According to the HBM, an individual will take an action if he/she considers himself or herself susceptible to the disease condition; if he/she believes that the condition if acquired has a serious consequences; if he/she believes that the available action or behaviour is beneficial for them; and if the benefit and taking the measure outweighed the barriers of doing so (Glanz et al. 2015:100).

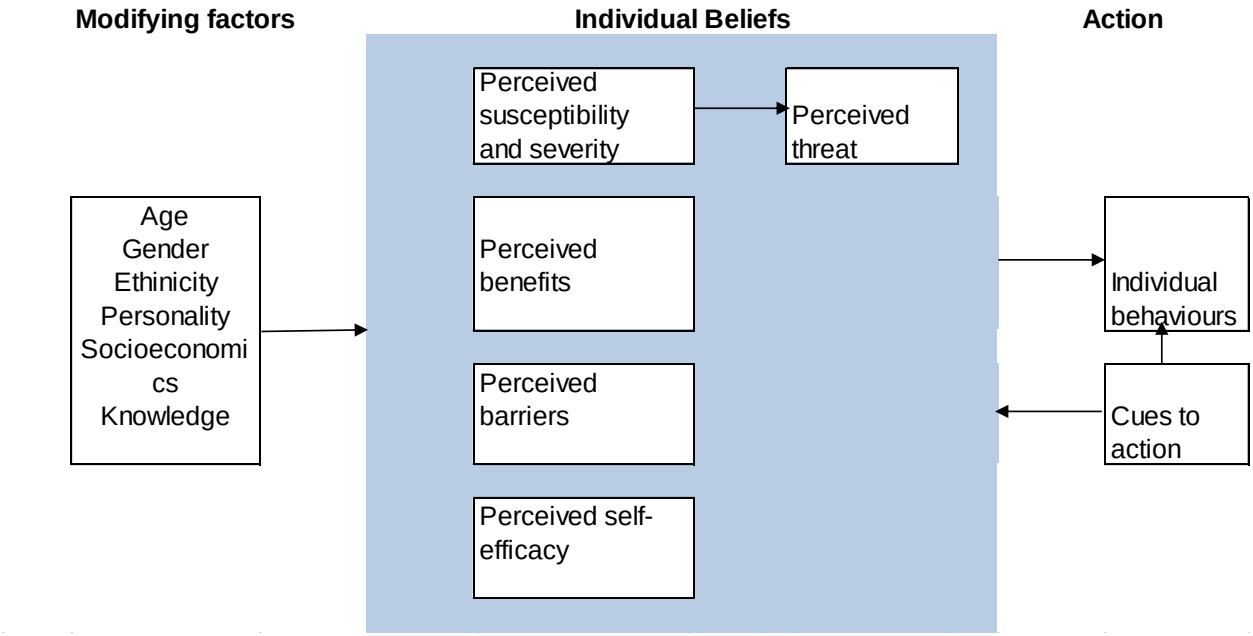


Figure2.1: The "Health Belief Model" as predictor of preventive health behaviour

2.2.1 CONSTRUCTS OF THE HEALTH BELIEF MODEL

2.2.1.1 Perceived susceptibility

Perceived susceptibility is one of the factors motivating an individual to undertake a certain kinds of health behaviour. It refers to individual's subjective assessment on the likelihood of developing a health problem. The higher the perceived susceptibility for a certain health problem, the higher the probability of engaging in behaviours to decrease the risk. In general, individuals are less likely to take action to prevent health problems if the disease is less likely to afflict them (Glanz et al. 2015:102).

Women are at risk of experiencing health problem during pregnancy, delivery and following delivery. These complications range from minor health problem to life threating conditions (Bayu, Adefris, Amano & Abuhay 2015:2). The first few days and weeks after birth are the opportune time to improve the health of the mother and the newborn given that the majority of deaths occur during this period. More than 67% of newborn deaths occur in the first 24 hours. Likewise, close to two third of maternal deaths occur in the post-natal period showing the time of high risk of deaths for both the mother and the newborn are alike (Sakeah, Aborigo, Sakeah, et al. 2018:2).

Different studies conducted on health seeking behaviour shows that the perception the person has about the susceptibility for certain disease conditions is one of the determinant factors for seeking care. If pregnant women regarded themselves as susceptible to adverse outcomes of pregnancy, they are more likely to utilise maternal health services (Ekhtiari, Majlessi, Foroushani & Shakibazadeh 2014:5).

A study conducted in Southern Region of Ethiopia showed that mothers who had knowledge on the danger signs of pregnancy and felt that they were susceptible were more likely to use PNC services (Abebo & Tesfaye 2018:6). A similar study conducted by Hordofa, Almaw, Berhanu, and Lemiso (2015:689) also showed that women did not know that they were supposed to go to health institution after they had given birth at home.

They only visited health facilities when they were encountered with some kinds of health problems.

In this study, the views and experiences of recently delivered women and health care workers on the complications or disease conditions that may arise post-delivery on the women and/or the newborn was established. This helps the researcher to establish whether women take action because they perceive their susceptibility. Hence, the researcher was able to develop strategies that strengthen that component.

2.2.1.2 Perceived severity

Perceived severity is one of the four perceptions described in the HBM. It refers to the perception of an individual about the seriousness the disease condition or the health problem if acquired. If the outcomes of the disease condition do not have significant negative impact on an individual, the individual is less likely to act to avoid it. This perception of the outcome of the disease may come from information or knowledge of the disease, it may also arise from a perception a person has about the problem a disease would bring or the effect it would have on the overall life conditions of the person (Glanz et al. 2015:102).

Postnatal period is a crucial period for the mother where most of the life-threatening server complications may arise. An analysis made from WHO dataset showed that haemorrhage was the leading cause of death worldwide accounting 27.1% of all deaths. Of all maternal deaths secondary to haemorrhage, more than 67% of them were due to postpartum haemorrhage. Hypertension was the second most common cause of death accounting 14% of the total deaths. Maternal deaths due to sepsis was 10.7%, abortion represented 7.9% of deaths and the rest 12.8% was taken by embolism and other direct causes of maternal mortality (Say, Chou, Gemmill, et al. 2014:326).

Several complications on the newborn can also occur during post-natal period. The WHO PNC guidelines reported that about 40% of neonatal deaths occur in the first 24 hours of

life. Of these deaths, about 75% of them are related with asphyxia and 40% of them happen owing to prematurity. Prematurity and sepsis related deaths account for 40% of neonatal deaths and 25% of asphyxia related deaths happen in the 1-7 days period. In addition, 30% of sepsis related deaths occur in the second week of life and 25% occur in the last 2 weeks of neonatal period (WHO 2013:17).

This study assessed the extent to which women realised the consequences of not receiving PNC services for themselves and the newborn. This helped the researcher to develop guidelines that would address the issue.

2.2.1.3 Perceived benefit

Perceived benefit focuses on the perception of an individual on the values or usefulness of a new behaviour in minimising the risk of developing a disease or a certain kinds of health problems. An individual adapts a new behaviour when she/he believes the new behaviour will decrease their chances of getting a disease. The perceived benefit focuses on effectiveness, advantage and feasibility of undergoing a certain kinds of health behaviour (Glanz et al. 2015:102).

A study conducted by Limenih, Endale and Dachew (2016:6) showed that those women who utilised PNC services were the ones who believed that following PNC visit was beneficial for them and for the newborn. A similar study conducted in Tanzania also showed that women who utilised maternal health services were the ones who believed in its benefits, who believed that the health facilities and the health care workers were prepared enough to provide quality health services (Lerberg, Sundby, Jammeh & Fretheim 2014:41).

PNC has a number of benefits to the mother, the newborn and the child. The morbidities and mortalities secondary to pregnancy related complications can be significantly reduced if the women receive PNC services.

This period is also a very good opportunity to promote healthy behaviour that can affect the health the mother, the newborn and the child (WHO 2013:3-5).

This study established the women belief on the importance of utilising PNC services for themselves and for the newborn. This facilitated the development of guidelines that clearly showed what should be the action to be taken to that would promote the utilisation of PNC services.

2.2.1.4 Perceived barriers

Perceived barrier is about impediments to undertake the chosen health behaviour. This can be perception of physical, psychological, social, economic, or other costs hindering the person from practicing the health behaviour. For a new behaviour to be adopted, an individual should believe that taking the chosen health behaviours outweigh the consequence of continuing with the old behaviour. If an individual perceives the existence of barriers such as cost, time or culture related that might prevent him/her from taking a certain kind of action, they are less likely to take action (Glanz et al. 2015:102).

Several studies conducted to identify the determinants of PNC service use have identified different kinds of barriers hindering the women from accessing health care services. A study conducted in Ethiopia showed that delivering in health facilities, following ANC services and having knowledge about maternal danger signs were some of the factors facilitating PNC service utilisation (Abebo & Tesfaye 2018:4). A study conducted in Kenya identified that lack of education and delivering at home as the major contributing factor (Akunga et al. 2014:1457). A similar study conducted in Tanzania to assess the factors associated with PNC service utilisation showed that being educated, having had instrumental delivery and being counselled by a community health care workers were some of the factors (Mohan, Gupta, LeFevre, et al. 2015:8).

In this study, barriers that affect the timely utilisation of PNC services were identified. A guideline that could address the barriers and possible intervention to tackle the identified barriers was developed.

2.2.1.5 Cues to action

In addition to the perceptions, health behaviours can also be influenced by cues to action. These are events, people or things that influence or trigger an individual to take a certain kinds of health behaviour action. Cues to action can include physical events such as pain or illness onset, having a family member or friend who contracted a condition, media coverage of health information about the condition, and advice from relatives, friends, and health care professionals. Each of these instances can influence an individual to undertake or sustain certain kinds of health behaviours (Glanz et al. 2015:102).

A study conducted in Indonesia to assess the factors associated with maternal health service utilisation found out that cue to action such as family support and health care workers advice were found to be among the factors contributing to the utilisation of the services (Probandari, Arcita, Kothijah & Pamungkasari 2017:7). Another study conducted in Ethiopia found out that women who had awareness about postpartum danger signs and their severity were more likely to utilise PNC services (Abebo & Tesfaye 2018:7).

Encountering complications during delivery is one of the cues leading the women to seek for PNC services. A study conducted on determinants of PNC use showed that those women with a complicated mode of delivery like a Caesarean section or forceps delivery were more likely to visit the health facility for postnatal services (Mohan et al. 2015:8).
This study has identified the internal and external cues contributing to the utilisation of PNC services. Identification of the cues helped the researcher to develop guidelines that would increase the utilisation and quality of postnatal care services.

2.2.1.6 Self-efficacy

Self-efficacy is defined as the conviction that one can successfully execute the behaviour required to produce the outcomes. Self-efficacy was later added into HBM maintaining the original concepts of susceptibility, severity, benefits and barriers. An individual should have the confidence in the ability to undertake the recommended health behaviours. Those individuals who have low efficacy are easily convinced to stop the activity in the face of difficulties or barriers while those of high efficacy will persevere in the face of challenges. Self-efficacy is developed through personal experiences, learning from others and through modelling (Glanz et al. 2015:174).

To utilise health care services like PNC, a woman should believe that she has the competencies for initiation and visiting the health facilities to utilise the services. When a woman has a sense of self-efficacy, she will execute the planned activities in the face of obstacles and challenges. For a health seeking behaviour like utilisation of PNC services, self-efficacy is one of the predominant determinant factors (Klunder & Lipowski 2015:46).

A study conducted by Izadirad, Niknami, Zareban, and Hidarnia (2017:71) to assess the relationship between self-efficacy and maternal health services showed that those women who had a sense of self-efficacy were more likely to utilise maternal health services. The financial support they got from their husband and the social support they received from their relatives were some of the contributing factors for them to have a sense of self-efficacy. A similar study conducted by Zheng, Morrell and Watts (2018:43) also shows that receiving social support from their husbands, relative and health care workers in the form of encouragement, time and money hugely contributed for the women to have self-efficacy and subsequently improved their health seeking behaviours.

This study assessed if the women used PNC services because of their confidence and awareness about the services or because the services were offered to them. The factors that would potentially build their confidence was investigated and a guidelines were developed that would improve the utilisation and quality of PNC services.

2.2.1.7 Modifying factors

Modifying factors relates to factors that interact with an individual's perception to influence the practice of the health behaviour. These modifying factors include but are not limited to socio-demographic factors, economic factors, social structures and psychological factors predicting certain kinds of health behaviour (Glanz et al. 2015:102).

A study conducted in eastern Ethiopia revealed that women who were literate, had exposure to media, and women with low parity were more likely to use PNC services (Regassa 2011:395). A similar study conducted in Ethiopia by Abebo and Tesfaye (2018:7) showed that delivering at health facility, following ANC services during pregnancy, being educated and had engaged in paid job had a strong association with PNC service utilisation. A study conducted in Nigeria found out that having information about maternal health services have significantly increased the likelihood of a woman to receive PNC services. This study identified exposure to PNC-related health education to a group of women had significantly increased utilisation of PNC services (Jibril, Saleh, Afolayan, et al. 2017:139).

This study established the psychosocial, economic, educational and other demographic factors that may facilitate or hinder the utilisation of PNC services.

2.2.2 JUSTIFICATION OF USING HBM

This main objective of this study was to establish the views and experiences of women and health care workers on PNC services. The HBM was used as a guide in the whole process of this research undertaking. More importantly, the HBM is a suitable model to assess the views, experiences and other factors that can facilitate or hinder utilisation of health care services or undertaking of some kinds of health behaviours. In this particular study, the HBM was used as a framework to establish the views and experiences of women and health care workers on PNC service utilisation.

The findings of this study were used to develop guideline that would influence the women's behaviour and educate them on PNC services. In addition, barriers of utilising PNC were identified and guidelines were developed to counteract them.

2.2.3 CONCLUSION

This chapter presented the HBM. It provided a brief description of the health belief model and its constructs. Detailed discussions were presented according to the theoretical framework of the study. It also explained the rationale for choosing the model as a theoretical framework for the study. The HBM was used in this study to establish the views and experiences of women and health care workers on PNC services.

CHAPTER 3

LITERATURE REVIEW

3.1 INTRODUCTION

Literature review is a scientific activity aiming at searching, reading, analysing, and evaluation of what is known, unknown, unrealised and gaps in the topics of the study. This involves the collection and review of documents which include evidence, ideas, information, and data on the topic of the study. Literature review also gives knowledge on the topic of the study and help identifies the gaps that should be filled by the study (Ridley 2012:3). In this particular study, literature review focuses providing a fuller picture on PNC services, its contributions towards reducing maternal and neonatal mortality and on factors associated with its utilisation and quality.

A review of published literature was done to search for studies conducted on postnatal care focusing on factors associated with the quality and utilisation in Sub Saharan Africa (SSA). Inclusion criteria were studies conducted in SSA published in English between 2003 to 2018. The studies included descriptive studies, case control studies, qualitative studies, situational analysis, programme evaluation and programmatic reports. The search were conducted in Google Scholar and PubMed using the following terms: (“postnatal care”) OR (“postnatal”) AND (“sub Saharan Africa”). Followed by (“postnatal”) AND (“factors”) OR (“postnatal”) AND (“experiences”).

3.2 DEFINING POSTNATAL CARE

PNC services have been provided for women and newborns since time immemorial. According to Byrom, Edwards and Bick (2010:14), midwives, in addition to attending the delivery, had a role in observing any signs that might indicate the mother or the newborn had higher risk of developing infection or haemorrhage. Historically, this practice of midwives has been existence for many centuries.

The contemporary books define postnatal period as a period starting immediately after the delivery of the placenta and membrane and continues for six weeks period. It is expected that within six weeks of delivery the major organs and the body systems would return to their pre-pregnancy state (Diane et al. 2011:649). The naming of the post delivery period is interchangeably used as “postpartum”, which refers to the mothers and “postnatal” which refers to the newborn. However, the new guideline of WHO recommends that postnatal should be used to name the period extending to six weeks post-delivery.

The post-natal period is also classified as immediate postnatal period: within 24 hours of delivery; early postnatal period: 2-7 days of delivery; and late postnatal period: 8-42 days of delivery (WHO 2013:16). World Health Organisation (2013:16) suggests that if the birth taken place in a health facility, mothers and newborns should receive PNC for 24 hours in the facility. If the birth happened at home, the first postnatal visit is recommended to be given within the first 24 hours, which is also known as immediate postnatal period. In addition, at least three additional PNCs are recommended for all mothers and newborns, on day three and between days seven to 14 after birth, and six weeks after birth.

3.3 POLICY ENVIRONMENT OF THE UTILISATION OF POSTNATAL CARE

There is no specific policy in Ethiopia pertaining to PNC services. In this section, health systems and strategies that may have effects on the utilisation of PNC services are explored. Four health systems and strategies affecting the utilisation of postnatal care services are identified. They include health care system of Ethiopia, the health extension program, reproductive health strategy, and the national strategy for newborn and child survival. Each of the system and strategies are briefly described together with its effect for postnatal service use.

3.3.1 THE HISTORICAL PERSPECTIVE OF MATERNAL HEALTH SERVICES IN ETHIOPIA

Modern medicine has started in Ethiopia in the late 19th century after the Victory of Adwa when Russian medical missionaries arrived in Ethiopia to provide medical services to more than 3,000 wounded soldiers. The first health facility in Ethiopia was also established by Russian medial missionaries in Addis Ababa in 1897. In 1909 the first hospital was opened by King Menelik II at the place where the Russian health facility found. The hospital had 30 beds and provided medical services and minor surgical interventions. Before that the people relied on traditional healers and herbal medicines. Deliveries were taken place at home by traditional birth attendants, care and support provided to the women and the new-born were given by the family members and relatives (Ethiopian Public Health Institute 2020).

The modern development of the health program in Ethiopia came into being when the first health proclamation was established in 1946. This proclamation gave ways to the expansion health facilities in the country through construction of hospitals, health centre and clinics in different towns of country thereby expanded provision of maternal health services at the health facility level (Torrey 1967: 277). In 1978 the Derg regime adapted the Alma Ata declaration of primary health care and started to provide promotive, preventive, curative and preventive health services to all segment of the population. Maternal and child health services were among the services included in the Alma-Ata declaration (Ostebo, Cogburn & Mandani 2017: 259).

The first health policy of the country was developed in 1993 setting for 50 years period emphasising decentralisation of the health services prioritising disease prevention and health promotion. For the purpose of effectively implement the health policy, health sector development plan was developed in 1998 with a vision of health sector development in 20 years. Since then this health sector development plan has been set every five years and is the foundation for the design and implementation of the programs which emphasised the provision of maternal, neonatal and child health services at the facility and community level (FMoH 1998: 5).

3.3.1 THE HEALTH CARE SYSTEM OF ETHIOPIA

The health care delivery of the country is organised into three-tiered system to make sure that primary health care (PHC) services are delivered through the country. This system includes (i) primary level healthcare comprising of primary hospital (serving 60,000-100,000 people), health centres and 5 satellite health post designed to serve 25,000 people; (ii) secondary level health care which consists of general hospital expected to serve 1-1.5 million people; (iii) tertiary level health care which consists of specialised hospital expected to serve 3.5 to 5 million hospital. In 2016, the country had 16,660 health posts, 3622 health centres and 266 hospitals (FMoH 2010:4).

The health posts are staffed with two health extension workers providing preventive, promotive, rehabilitative services at outreach and at the health post level. The health centres and hospitals are staffed with various categories of health care workers. As you go up on the health system, you find much specialised health care workers providing curative services to complicated cases. PNC services are provided at all level of the health system following the PNC visit schedules described in other sections.

3.3.2 THE HEALTH EXTENSION PROGRAMME OF ETHIOPIA

Ethiopia has been implementing Health Extension Program (HEP) since 2004 to ensure PHC services are accessible to all segments of the population of the country. It is one of the flagship programmes of the government to ensure the needed promotive, preventive, curative, rehabilitative, and palliative health services are delivered in sufficient quality minimising the financial burden of utilising health care services. The HEP makes essential health care services universally available through a package of preventive, promotive, minimum curative and rehabilitative services provided by Health Extension Workers (HEWs). The HEP includes four major components: i) Family Health, ii) Disease Prevention and Control, iii) Personal Hygiene and Environmental Health, and iv) Health Education and First Aid (Wang, Tesfaye, Ramana & Chekagn 2016:22).

PNC is one of the programmes of the health extension programme under the family health component in which the health extension workers are supposed to provide the service at the health post as well as at the household level. Nevertheless, a study conducted in Ethiopia to assess the role of health extension workers in improving utilisation of maternal health services in rural Ethiopia showed that though the health extension workers have contributed substantially to the improvement in women's utilisation of family planning, ANC and HIV testing, their contribution towards improvements of skilled delivery and postnatal check-up were insignificant. Less favourable working conditions at the health posts, high workload and walking long distances to reach the mothers' house were cited as reasons for low performances (Medhanyie, Spigt, Kifle, et al. 2012:7).

3.3.3 REPRODUCTIVE HEALTH STRATEGY OF ETHIOPIA

The country has developed a National Reproductive Health Strategy in 2016 with the overall aim of enhancing the reproductive health status of women, men and young people in Ethiopia. This reproductive health strategy will be in place until 2020 being used as a strategy for reduction of maternal and neonatal mortality in Ethiopia, empowering women, men, families, and communities to recognise pregnancy-related risks, ensuring access to a core package of maternal and neonatal health services. The strategy has emphasised the importance of community awareness on complication readiness and birth preparedness. In addition, the availability of basic and comprehensive EmOC, and therefore by reduction in obstetric complication occurrence and case fatality were the main targets. The provision of PNC services is described as one of the strategies to be implemented to reduce the maternal and neonatal mortalities (FMoH 2016:14).

3.3.4 NATIONAL STRATEGY FOR NEWBORN AND CHILD SURVIVAL IN ETHIOPIA

The Federal Ministry of health of Ethiopia developed a comprehensive National Child Survival Strategy covering the period 2015-2020 to boost the child survival efforts of the country through implementation of high impact interventions. Under this strategic document, the provision of maternal, neonatal and child health services at household level are emphasised with the following components:

- conduction of regular mapping of households with pregnant women, newborn's and under-five children;
- undergoing planned monthly household visits to provide individual counselling on high impact maternal newborn health and child survival interventions and provide care as needed;
- regularly follow up with case-specific households to monitor family compliance with pregnancy monitoring and monitoring of child growth and development in the areas of: nutrition, breastfeeding, immunisation schedules, vitamin A, treatment advice, etc.; and
- provision of targeted basic health promotive, disease preventive and curative services at home and in the health posts are prioritised.

In addition, training of health care workers on skills for delivery, essential newborn care, newborn sepsis management, lifesaving skills, and emergency obstetrics care, including management of third stage of labour during deliveries; neonatal intensive care unit (NICU), and training on integrated management of maternal and neonatal illness are also given emphasis (FMoH 2015a:39-41).

3.4 MODELS OF POSTPARTUM CARE SERVICE DELIVERY

PNC can be provided at household level in which the service is provided for the mother and the baby at their house. The service can also be provided at the health facility where the mother and the newborn visit the facility for the services on the scheduled period or whenever there is a need for the visit.

3.4.1 HOME-BASED POSTNATAL CARE (PNC)

The Ethiopian National Strategy for Newborn and Child Survival outlines the strategic interventions to be implemented at community level, health centre and hospital levels. The strategic interventions consist of packages of prioritised 34 high impact and cost effective newborn and child survival interventions. One of the packages specified on the

document include provision of early PNC services at the facility as well as at the community level (FMoH 2015a: 3).

The WHO guidelines on PNC recommended that all mother delivering in the health facilities should not be discharged before 24 hours to closely follow their and their newborn health and manage any complications that may arise following delivery. In addition, for all home deliveries, the first visit should take place in the first 24 hours, the second visit should on the third day and the third visit should be before the end of the first week of life (WHO 2013:130).

Since 2002, Ethiopia has been implementing health extension programmes which involve two health extension workers per health post to provide health services for a maximum of 5000 people. This programme has 16 programme packages to be implemented at health post and at the households' levels. The provision of maternal and child health services is one of the 16 packages which included provision of early PNC services for those who delivered at home (Wang et al. 2016:22).

Community based provision of PNC services (maternal and newborn health services) has been implemented and evaluated in five countries, namely: Bangladesh, Malawi, Nepal, Nigeria, and Rwanda. The implementation of this programme resulted in improvements of facility-based deliveries and PNC services for the mother and the newborn. However, early home visits by the community health care workers on the first day after delivery was found to be very challenging to achieve (USAID 2012:31).

A study conducted in Switzerland to assess the cost-effectiveness of home-based versus hospital-based PNC services showed that early discharge from health facility following delivery followed by home visits by midwives resulted in a significant cost savings without compromising the health of the mother and the newborn (Petrou, Boulvain, Simon, et al. 2004:804).

3.4.2 FACILITY BASED POST-NATAL CARE (PNC)

The WHO Guidelines on PNC services suggest that after uncomplicated delivery in the health facility the women and the newborn should be admitted for at least 24 hours and closely followed up. If the birth is at home, the women and the newborn should receive the first PNC services within 24 hours and at least receive three additional visits on day on day 3 (48–72 hours), between days 7–14 after birth, and six weeks after birth (WHO 2013:130).

During each PNC visit, women require a wide range of services. Most services are straightforward and do not require sophisticated diagnostic equipment or health expertise. The services to be provided in each visit addressed the health risks and particular intervention that should be implemented in that particular visit period. In the first 24 hours of visits, the women should be assessed for vaginal bleeding, uterine contraction, fundal height, body temperature, and blood pressure. The women should be also counselled to delay bathing for at least 24 hours and on proper clothing of the newborn to prevent hypothermia (WHO 2013:25).

For the visits beyond 24 after birth, the women should be checked for urinary inconsistency, bowel function, healing of perineal wound, headache, fatigue, back pain, perineal pain, breast mastitis, uterine tenderness, and lochia. In addition, the women should also be assessed for her psychosocial health status and receive counselling services on danger signs that might occur during postnatal period; breast-feeding and nutrition; hygienic care of the newborn and family planning (WHO 2013:25).

In the first 15 days after birth, all women should be assessed about resolution of mild transitory postpartum depression (“maternal blues”). If symptoms have not been resolved, the woman’s psychological well-being should continue to be assessed for postnatal depression, and if symptoms persist, evaluated. Women should be observed for any risks, signs and symptoms of domestic abuse.

For the newborn the bulleted below signs should be assessed during every postnatal visit and the newborn should be further investigated or referred if any of the below signs are identified (WHO 2013:20).

- Stopped feeding well
- History of convulsions
- Fast breathing (breathing rate >60 per minute)
- Severe chest in-drawing
- No spontaneous movement
- Fever (temperature >37.5 °C
- Low body temperature (temperature <35.5 °C)
- Any jaundice in first 24 hours of life, or yellow palms and soles at any age.

In addition, the health care workers should make sure that the newborn is put on exclusive breast-feeding practices for the first six month and Chlorhexidine is applied on the umbilical cord stump on daily basis for the first week of delivery to prevent infection/sepsis secondary to umbilical cord infection.

The PNC services can be provided either at the facility or household level. Based on the evidence generated from randomised controlled trials done at different countries to see the outcome of undergoing home visits during the first week of delivery, WHO recommends doing home visits in the first week of delivery by midwives, trained health care workers and/or supervised CHWs to provide PNC services at household level (WHO, 2013:18). In addition, irrespective of the place of delivery and irrespective of whether a skilled birth attendant attended the delivery or not, almost all of the newborn deaths occur at home. Given that most of the deliveries are at home and 67% of maternal deaths occur during the postnatal period, PNC visit by health care workers at home is of paramount importance towards decreasing maternal and neonatal mortalities. However, if the mother manages to visit the facility, PNC services can also be provided at the facility level (Sines et al. 2007:1).

3.5 UTILISATION OF PNC SERVICE IN ETHIOPIA

In the past decades, Ethiopia has seen improvements in the utilisation of ANC and institutional delivery rate. However, although more than half of maternal deaths occur during postnatal period, the PNC service is the least utilised service. According to EDHS 2016 Report, only 17% had a postnatal check during the first two days after birth when it was 62% for women who used any ANC service. The PNC for newborn babies was even lower where only 13% of the newborns received PNC services within the first two days (Central Statistical Agency of Ethiopia & ICF International 2016:139).

The EDHS Report shows that those women who delivered in a health facility were more likely to use PNC services within the first two days than those who delivered at home (42% versus 2%). The Report also indicated a disparity between urban and rural women in PNC service use (45% versus 13%). In the regions where this study was taken place, only 9% of the women received PNC services when it was 55% in Addis Ababa, the capital of Ethiopia. There was also disparity in PNC services use for newborn babies where urban women are more likely than those born to rural women to receive a check-up within the first two days after birth (Central Statistical Agency of Ethiopia & ICF International 2016:140).

3.6 POSTNATAL CARE AND REDUCTION OF MATERNAL AND NEONATAL MORTALITIES

Postnatal period is a critical period for both the mother and the newborn. The first few days and weeks after birth are the opportune time to improve the health of the mother and the newborn given that the majority of deaths occur during this period. More than 67% of newborn deaths occur in the first 24 hours. Likewise, close to two thirds of maternal deaths occur in the post-natal period showing the time of high risk of deaths for both the mother and the newborn are alike. However, different policies and programmes overlook this period of time (Sines, Syed, Wall & Worley 2007:1).

3.6.1 MATERNAL MORTALITIES

In 2015 alone, globally, 303,000 women died secondary to pregnancy related complications. Of these, the majority, 99%, occurs in developing countries. Sub-Saharan African countries accounted 66% of the total deaths followed by South Asian countries accounting the remaining 21.7%. From 2015 onwards, sub-Saharan African countries and Oceania are the two WHO regions with the highest mortality ratio of 546 and 187 per 100,000 live births, respectively (WHO et al. 2015:21).

In 1990, when the MDGs target was set, the united nation member countries pledged to reduce the maternal mortality ratio by 75% by the end of 2015 from the 1990 baseline figure of 385 per 100,000 live births. However, the maternal mortality ratio by the end of 2015 was 216 per 100,000 live births indicating the ratio has been fallen by only 44%. Continuing the commitment and the efforts of reducing MMR, the member state set a new target of brining MMR to less than 70 per 100,000 live births by the end of 2030. To achieve this target, there should be at least a 9.7% reduction every year (WHO et al., 2015:16; United Nations 2015:20).

Both WHO and the EDHS reported higher figure of maternal mortality in Ethiopia. The Maternal Mortality Report of 2015 (WHO et al. 2015:51) indicated that in 2015 the MMR of Ethiopia was 353 per 100,000 live births indicating about 11,000 mothers died secondary to pregnancy related complications in the same year. However, the 2016 Ethiopian Demographic and Health Survey reported a significantly higher figure of maternal mortality of 412 per 100,000 live births between the periods of 2009-2016. This figure is lower by 38.7% than the figure reported in the 2011 EDHS, which was 673 per 100,000 live births reflecting a successful implementation of MNCH programmes in the country (Central Statistical Agency of Ethiopia & ICF International, 2016:47). All of the sources indicated the mortality ratio fall under the high category of set by WHO which categorised MMR as low if it is less than 100, moderate if it is between 100-299, high if it is between 300-499, very high if it is between 500-999 and extremely high if it is greater than or equal to 1000 maternal deaths per 100,000 live birth (WHO et al. 2015:16).

3.6.2 CAUSES OF MATERNAL MORTALITY

World Health Organisation has published an article showing the global causes of maternal mortality. This publication was made out of the systematic analysis done utilising the vital registration dataset of WHO and analysis of bibliographic datasets obtained from different countries. The analysis found out that about 73% of all maternal mortalities between 2003 and 2009 were owing to direct obstetric causes whereas mortalities owing to indirect causes accounted the rest 27% of all maternal deaths. Haemorrhage was the leading cause of death worldwide accounting to 27.1% of all deaths. Of all maternal deaths secondary to haemorrhage, more than 67% of them were owing to postpartum haemorrhage. Hypertension was the second most common cause of death accounting 14% of the total deaths. Maternal deaths due to sepsis were 10.7%, abortion represented 7.9% of deaths and the rest 12.8% was taken by embolism and other direct causes of maternal mortality. The data also showed that of the total direct maternal deaths, 52.7% of it occurred in sub-Saharan African countries. In addition, of the deaths occurred in sub-Saharan African countries secondary to haemorrhage the majority, 62.3%, of them occurred during postpartum period (Say et al. 2014: e326).

A study conducted by Li, Fortney, Korteclchuck and Glover (1996:6) showed that in developing countries, 45% of postnatal deaths happened on the first day of delivery, 24% occurred between 2-7 days, 14% between 8-14 days, 8% between 15-21 days, 6% between 22-30 days, and 4% between 31-42 days. This study showed that although the risk of dying secondary to pregnancy related complications decreases over period of time, the instance of dying can happen up to 42 days of pregnancy.

3.6.3 NEONATAL MORTALITY

Globally, 2.9 million newborn die annually owing to pregnancy related complications of which more than 75% of them occur in sub-Saharan African countries and South Asia. Close to 40% of stillbirths and newborn deaths occur during labour and in the first 24 hours of delivery. In addition, close to 75% of neonatal deaths occur during the first week

of life. In addition, globally about 1.5 million babies survive with long-term complications (Lawn, Kinney & Blencowe 2014:2).

In 2015 alone in sub-Sharan African countries, 1,027,000 neonates died owing to birth-related complications which accounted for 38.2% of total global neonatal deaths recorded in the same year (UNICEF, et al. 2015:7). Of the total neonatal deaths recorded in 2015, in sub-Saharan African countries, 87,000(8.5%) of them were registered in Ethiopia with 28 deaths per 1000 live birth (UNICEF, 2015:21). The EDHS 2016 also reported comparable figure of neonatal mortality rate in Ethiopia which was 29 per 1000 live birth in 2016 (Central Statistical Agency of Ethiopia & ICF International 2016:22).

The percentage of decrement of neonatal mortality rate in the millennium development goal (MDGs) period was not significant. Globally, the neonatal mortality rate has declined to 19 deaths per 1000 live births from 36 deaths per 1000 live births in 1990. In terms of percentage, the decline was 48%. However, this decline in the neonatal mortality was slower compared to the 57% decline in post-neonatal mortality rate. In addition, in sub-Saharan African countries, the decline in the percentage of neonatal mortality rate was even very slow at 38% from 46 to 29 per 1000 live births (UNICEF et al. 2015:7).

3.6.4 CAUSES OF NEONATAL MORTALITY

The WHO PNC guidelines reported that about 40% of neonatal deaths occur in the first 24 hours of life. Of these deaths, about 75% of them are related to asphyxia and 40% of them happen owing to prematurity. Prematurity and sepsis-related deaths account for 40% of neonatal deaths and 25% of asphyxia-related deaths happen in the 1-7 days period. In addition, 30% of sepsis-related deaths occur in the second week of life and 25% occur in the last week weeks of neonatal period.

Care around birth has a total effect of 41% towards reduction of maternal and neonatal mortalities and can prevent 1.5 million maternal and neonatal deaths until 2025. These cares include skilled care and emergency obstetric care; immediate care for a newborn

baby including breastfeeding, cord and thermal care and newborn resuscitation. In addition, care for small and ill newborn babies has a total effect of 30% towards the reduction of maternal and neonatal mortalities preventing the death of more than 600,000 mothers and newborns until 2025. This result can be achieved with straightforward interventions including kangaroo mother care, prevention or management of neonatal sepsis, neonatal jaundice, and neonatal encephalopathy after intrapartum hypoxia (Lawn et al., 2014:5). This indicates that PNC has substantial effect towards reducing maternal and neonatal morbidities and mortalities.

3.7 PRIORITY INTERVENTIONS FOR WOMEN AND THE NEWBORN DURING PNC PERIOD

A global review was conducted on the key interventions related to Reproductive, Maternal, Newborn and Child Health (RMNCH) by WHO in 2017 to identify intervention that has significant impact on maternal, newborn and child survival and can be implemented in low and middle-income countries through the existing health system.

This review came up with lists of interventions that can be implemented before pregnancy, during pregnancy, at the time of delivery, and at the postnatal period (PMNCH 2011:15). For the sake of this study, the interventions described are taken from the review document.

3.7.1 MATERNAL PRIORITY INTERVENTION DURING POSTNATAL PERIOD

3.7.1.1 Counselling on family planning

Counselling the postpartum women on family planning is one of the services the women should receive during postnatal period. Several studies conducted in different countries showed that family planning counselling during postpartum period has significantly increased the utilisation of contraception or delaying pregnancies in the first years following delivery.

3.7.1.2 Detection and management of sepsis

Infection following delivery (endometritis) can occur in about 1 to 3% of vaginal deliveries and with caesarean section delivery a woman has 5-20-fold increase of acquiring infection. Prolonged rupture of membrane and frequent vaginal examination increase the risk of acquiring the infection. Infection following delivery may result in fever, unpleasant-smelling lochia, wound infection, bacteraemia, urinary tract infection, and other severe complications. Sepsis can be managed by administration of a combination of antibiotics at health facility. For infection following caesarean section, different studies demonstrated that provision of prophylactic antibiotics could substantially reduce its occurrence.

3.7.1.3 Prevention of postpartum haemorrhage (PPH)

Bleeding following delivery is one of the major contributors for maternal morbidities and mortalities. Primary PPH is defined as excessive bleeding within 24 hours of childbirth.
One of the interventions to prevent PPH is active third stage management of labours which includes the use of uterotonic agents, early cord clamping and controlled cord traction. Of the aforementioned interventions, the use of uterotonic agents such as oxytocin has a significant impact in reducing PPH by combining to oxytocin receptors present in the uterus and causes increased tone and rhythmic contractions of the uterus and also increases the frequency of existing contractions.

3.7.1.4 Detection and treatment of maternal anaemia

Anaemia can occur following delivery owing to excessive bleeding at the time of birth or post-delivery, malaria, inadequate dietary intake or parasitic infection. Interventions directed to anaemia include supplementation of iron and blood transfusion for severe anaemia. The provision of Erythropoietin may help improve iron levels in the blood and the woman’s ability to lactate.

3.7.2 PRIORITY POST-NATAL INTERVENTION

The priority interventions directed to the newborn are categorised into immediate newborn care, intervention for neonates with infection and intervention for small and ill babies.

3.7.2.1 Priority interventions for immediate newborn care

- Promotion and provision of thermal care for all newborns to prevent Hypothermia (immediate drying, warming, skin to skin, delayed bathing);
- Promotion and support for early initiation and exclusive breastfeeding (within the first hour);
- Promotion and provision of hygienic cord and skin care;
- Neonatal resuscitation with bag and mask for babies who do not breathe at birth; and
- Newborn immunisation.

3.7.2.2 Priority interventions for neonatal infection management

- Presumptive antibiotic therapy for the newborns at risk of bacterial infection;
- Case management of neonatal sepsis, meningitis and pneumonia; and
- Initiation of ART in babies born to HIV infected mother.

3.7.2.3 Priority interventions for small and ill babies

- Kangaroo mother care (KMC) for preterm and for < 2000g babies;
- Extra support for feeding the small and preterm baby;
- Prophylactic and therapeutic use of surfactant to prevent respiratory distress syndrome in preterm babies;
- Continuous positive airway pressure (CPAP) to manage pre-term babies with respiratory distress syndrome; and
- Management of newborns with jaundice.

3.8 FACTORS ASSOCIATED WITH PNC SERVICE UTILISATION

3.8.1 DEMOGRAPHIC AND SOCIO-CULTURAL FACTORS

A secondary analysis of Rwandan DHS 2010 data to assess factors associated with postnatal care service utilisation showed that of the total 2748 women with live birth in the last two years prior to the survey year, only 353 (12.8%) of them visited the facility for PNC within seven days after birth. Delivering at health facility, being married but not involved with one's own health care decision-making and being in the second or wealthiest quintile were associated with the utilisation of PNC services. On the contrary, the older age of the mother during delivery was negatively associated with PNC service utilisation (Rwabufigiri, Mukamurgo, Thomson, Hedt-Gautier & Semassaka 2016:3).

A similar study conducted in Kenya to assess the determinants of PNC service utilisation among Kenyan women using the DHS 2008/09 data showed that only 47% of the women received PNC services. Early age of the mothers at delivery of the last child, having ANC visit of more than four times, being residence of urban settings and delivering at health facilities were associated with PNC service utilisation. Lack of education and unskilled delivery were associated with low utilisation of PNC services (Akunga et al 2014). Sometun and Libisomi (2016:5) also studied the determinants of PNC non-utilisation among women in Nigeria using the DHS 2013 data. Accordingly, they also found out that only 37% of the women utilised PNC service and are not using ANC, illiteracy, delivering at home and being in the lowest wealth quintiles was significantly associated with non-utilisation of PNC services.

A study conducted in Gondar Zuria District of Ethiopia to assess the knowledge, perception and utilisation of PNC services identified that 84.4% of the women had awareness about PNC services. However, it was only 66.8% of them who actually utilised the service. Distance from the health facility, lack of guidance at home to take care of the children when the women went to the facility, lack of time, and lack of decision-making

power for accessing health services were identified as the barriers for utilisation of PNC services. The qualitative part of the study also showed that the majority of the discussants had the awareness about PNC services, but most of them did not know about when and for who the services should be provided. In addition, some of the study participants did not see the value of visiting the facility unless the newborn or they themselves were ill (Fikrte et al. 2014:2343). In the study conducted in SNNPR, Ethiopia, Regassa (2011:392) also identified low utilisation of PNC services and educated women, women exposed to media and low parity were significantly associated with increased utilisation of PNC services.

A study was conducted in Indonesia to assess the factors associated with non-utilisation of postnatal care services. The data utilised the 2002-03 Indonesia Demographic health survey data to analyse the factors.

This study identified that despite the majority of the deliveries being attended at home, 67% of the women received PNC services in the first week of life. In addition, the rural community utilised PNC services more than the women residing in urban community. Higher birth rank, low household wealth index, poor maternal knowledge of complications during pregnancy, childbirth or postnatal period and no maternal exposure to mass media like TV, Radio or newspapers were associated with low utilisation of PNC services (Titaley, Dibley & Roberts 2009:829).

A study was conducted on women who gave birth in Los Angeles County, California to identify predictors and barriers to postpartum care. The study was a cross sectional population-based study that assessed the maternal and children health outcomes during pre-pregnancy, antenatal and postnatal periods. This study found that low income, being separated/never married, not feeling happy the current pregnancy and lack of prenatal care be risk factors of postpartum care non-use. The most common identified barriers were feeling fine, being too busy with other priorities and lack of needs (Dibari, Yu, Chao & Lu 2014:4).

3.8.2 PNC SERVICES QUALITY-RELATED FACTORS

The utilisation of PNC services is affected by different dimension of quality of services provided at the health facilities. Some of the dimensions identified on the literature affecting utilisation of PNC include the following:

- inadequate provision of information to the mothers about PNC services;
- not good relationship between the women and the health care workers; and
- not receptive health care providers and long waiting time.

A study conducted in Nigeria identified that the women feeling of dissatisfaction about the health services provided at the health facilities discouraged them from utilising the services. This study also identified that the majority of the women did not receive support or encouragement from health care providers to utilise the services. Health care workers lack of skills on provision of PNC services and their lack of demonstrating their role in PNC services is also cited as factor for underutilisation (Okonofua, Ogu, Agholor, et al. 2017:5).

A study conducted in India found out that the availability of medical equipment and supplies for maternal health services is associated with the increased utilisation of antenatal and postnatal services. The unavailability of a labour/examination table and bed screen is associated with a reduction in the number of deliveries and postnatal services. The study recommended that the utilisation of services will increase if essential facilities, such as water, telephones, toilets, and electricity, are available at the health facilities (Singh 2016:13).

Chimtembo, Maluwa, Chimwaza, et al. (2013:346) conducted a study assessed the quality of PNC services provided to mothers in Dedza District of Malawi. This study employed the Donabedian structure, process and outcome model of quality of care. The study interviewed midwives working in the health facilities and made observation as well while the service was being delivered.

Accordingly, the study found out that the structure for providing PNC service was not appropriate and not adequate. In addition, the contents of the PNC services provided was also found to be below the standard in which the majority of the mothers were not examined physically on discharge.

3.8.3 MATERNAL PERCEPTION ABOUT PNC SERVICES

The perception of the women about PNC services is strongly associated with service use. Women are more likely to use PNC services if they believe that it is important for them and for their health. A study conducted in Nigeria found that women who did not utilise PNC services had poor perception about the use of PNC services and they considered it for women who are already sick.

Furthermore, a study conducted in Indonesia showed that the women's perception about PNC service could be affected by factors such as the distance of the health facility from their village, lack of transportation services in which those women who were living far from the health centres and those who did not get transportation services were not utilising the services. This study also showed women who delivered at home were less likely to go for PNC services fearing the blame from health care workers on why they chose to delivery at home (Probandari et al 2017:5; Sometun & Libisomi 2016:5).

The utilisation of PNC services is also affected by the choice of women on the treatment and the care of providers. A study conducted in Indonesia showed that women preferred traditional healers more than the formal health care providers for PNC services. Moreover, friends and relatives were also reported to be more trusted for the provision of PNC services. This study also identified that home-based care treatment is the first choice during PNC period. Modern health services were required only if the first choice were not effective in curing the ailment acquired (Probandari et al. 2017:5).

3.8.4 PERCEPTIONS OF WOMEN ON PNC COMPLICATIONS

A cross sectional study conducted in North Gondar Ethiopia to assess maternal complications and women's behaviour in seeking care from skilled providers showed that 28.5% of the respondents reported some kinds of complication during and after pregnancy. The most common complications were excessive bleeding and prolonged labour which occur at the time of delivery and during postnatal period. Only 52.1% of those women with complications had actually sought treatment. This study found out that inability to judge the severity of the complications, distance/transport problems, lack of finances to access the services and preferences to traditional medical practices as a reason for not seeking health care from a skilled providers (Worku, Yalew & Afework, 2013:4).

Limenih et al. (2016:3-4) conducted a most recent study on PNC service utilisation and their associated factors among 588 women residing in Debremarkos Town of Ethiopia, which is one the towns in Amhara Region. The study employed a cross-sectional community-based study design. This study identified that 40.5% of the women knew about PNC services, 38.4% of them were aware of maternal complications and 37.2% of them knew about neonatal complications. However, only 33.5% of them utilised PNC services. Of whom, only 16.2% received the service more than three times. In addition, it was only 60.4% of them received the service within 3-7 days. This study also found out that awareness about maternal complications, place of delivery, outcome of birth, model of delivery and delivery complications were significantly associated with PNC service utilisation.

3.8.5 MATERNAL KNOWLEDGE

The utilisation of health care services can be increased by the knowledge the person has about the specific diseases. A study conducted in Nigeria found out that having information about maternal health services has significantly increased the likelihood of a woman to receive PNC services. This study identified exposure to PNC-related health education to a group of women had significantly increased utilisation of PNC services

(Jibril et al 2017:139). Another study conducted in Kenya showed that utilising ANC services has increased the likelihood of PNC service utilisation. This study identified that when a woman gets adequate information about maternal health services during ANC visits, the likelihood of accessing PNC services is increased (Akunga et al 2014:1455).

A study conducted in Nigeria found out that delivering at health facilities were associated with utilisation of PNC services in which the women who delivered in a health facility has got information about the availability and use of PNC services (Sometun & Libisomi 2016:5). Another community-based cross sectional study conducted in Ethiopia to assess utilisation of institutional deliveries and PNC services found that those women who delivered at the health facilities had 3.9 times more likely to use PNC services (Darega, Dida, Tafese & Ololo 2016:6).

3.8.6 ECONOMIC-RELATED FACTORS AFFECTING UTILISATION OF PNC SERVICE UTILISATION

The health care services costs can be categorised into direct (such as medical fees, medical supplies, and transportation costs), and the opportunity costs (time and money) that the postpartum women or any person accompanying to the health facilities (Pavel, Chakrabarty & Gow 2016:2). Different studies identified lack of money as a major factor affecting the women's decision in accessing PNC services. In a study conducted in South Africa, lack of money was identified as one of the factors affecting the women's decision in accessing maternal care and treatment services when they were ill (Tsawe & Susuman 2014:6).

3.8.7 PHYSICAL ACCESSIBILITY RELATED FACTORS AFFECTING UTILISATION OF PNC SERVICE UTILISATION

The women's willingness and ability to access PNC services is affected by the distance of the facility from the health facility. Living in either urban or rural settings is also among the factors affecting PNC service utilisation. This is evident from the EDHS 2016 in which 45% of urban women utilised health care services while it was only 13% for women

residing in rural settings (Central Statistical Agency of Ethiopia & ICF International 2016:140). A study conducted in Kenya also identified that women residing urban settings were 1.42 times more likely to use PNC services than those women living in rural settings (Akunga et al. 2014:1456).

3.8.8 CULTURAL AND TRADITIONAL RELATED FACTORS AFFECTING PNC SERVICE UTILISATION

A qualitative study conducted in Nepal to assess cultural practices and beliefs surrounding childbirth and postnatal period revealed several practices that can potentially harm the health of the newborn and the mothers as well as hinder the women from accessing PNC services. Some of the traditional practices include the use different substances on the cord stump and use of variety of tools to cut the cord. The placenta is also buried under a tree or on the junction of a road wishing the new baby to have a better future. Isolating women for some time in a cowshed is also described as one of the PNC practices. As pregnancy is thought not clean, purification ceremonies take place for at least ten days. There are also traditional practices for naming the new baby (Sharma, Teijlingen, Hundley, Angell & Simkhada 2016:3-6).

A cross sectional study conducted in Ethiopia to assess cultural practices during pregnancy, child birth and postnatal period among women of child bearing age in South west Ethiopia showed that 19.1% of the interviewed women practiced nutritional taboo. In contrast, 22% practiced abdominal massage near term, 38.3% of them delivered their babies at home, 28.4% of them washed their babies immediately after birth and 22.4% of the did not give colostrum to the baby. Educational status was significantly associated with nutritional taboo, abdominal massage, home delivery and avoiding colostrum feeding to newborn (Tola & Tadesse 2015:754). Another cross sectional study conducted in Eastern rural area of the country to assess newborn care practices and health seeking behaviour identified suboptimal newborn care practices in the study areas with 71% of the newborn baby was bathed in the first 12 hours of delivery (Gebre, Biadglign, Tadesse, et al. 2017:4).

A similar study was also conducted in Jimma Town, Ethiopia to assess the traditional newborn care identified some practices that can potentially harm the health of the newborn. The study identified that Bedding-in (babies slept with mothers) was done for 591 (96.9%) neonates, pre-lacteal feeds was given to 77 (12.6%) neonates and 305 (50.0%) were initiated on breast-feeding after 12 hours of the delivery. On-demand and frequent (> 8/day) breast-feeding was reported by 569 (93.2%) of the mothers and breastfeeding problems by 44 (8.9%) of the mothers, 356 (58.4%) of the babies were bathed within 24 hours of delivery, butter was applied to the umbilical stump in 32 (48.7%) of the home delivered babies and only 17/85 (2.8%) “small” babies received additional care (Girma & Nida 2008:82).

3.9 INTERVENTION STRATEGIES TO IMPOROVE UTILISATION OF PNC SERVICES

Intervention targeting improving the quality and utilisation of PNC services has been tried in different countries. These intervention strategies are directed to strengthening the health system through capacity building of the health care workers and supply of medical equipment and supplies. There are also interventions directed to increasing the accessibility and utilisation of services by working with community members and use of technologies.

A narrative synthesis made on workforce intervention to deliver PNC to improve neonatal outcome in low and lower middle-income countries showed that various on the job training had been provided to the health workforce to improve the service quality and thereby reduce neonatal and maternal mortalities. The trainings included classroom teaching on the topics of maternal and newborn care followed by practical session at health facilities and at household levels. Supervisors who were trained on maternal and newborn care and supervision skills were also providing supportive supervisions to the trained health care workers. The supervisors were also assessing and monitoring through spot checks during their home visits (Akter, Sibbritt & Dawson 2016:663).

A study was conducted in four sub-Saharan Africa countries to design interventions that would improve the availability, utilisation and quality of PNC services. The study employed a stage wise approach to come up the possible list of interventions. Need assessment, meetings, discussion, and workshop were conducted with stakeholder to assess the situation of PNC services to identify the challenges and put forward list of interventions that will improve the quality and utilisation of PNC services. The prioritised interventions were introduction of postpartum home visits, strengthening postpartum outreach services, integration of postpartum services for the mother in child immunisation clinics, distribution of postpartum care guidelines among health workers and upgrading postpartum care knowledge and skills through training (Duysburgh, Kerstens, Kouanda, et al. 2015:5).

A bundle of interventions was implemented in Mali and Niger to improve the MNH services. The intervention included identification of measurable, feasible MNH indicators considering proven best clinical practices; creation of national expert group at central level the lead and coordinate the MNH interventions in the countries; conduction of baseline assessment to measure quality gaps and engaging local stakeholders; capacity building of the health care workers to improve MNH service provisions; paying periodic supportive supervision visits; and undergoing quarterly review meetings to share learning lessons and best practices with the health care workers and other stakeholders were among the interventions implemented (Boucar, Hill, Coly, Djibrina, Saley, Sangare, Kamgang & Hiltebeitel 2014:128).

Working with the community groups and volunteers has huge impact towards reduction of maternal and neonatal mortalities. This was demonstrated by a cluster-randomised trial conducted to assess the effect of women's groups and volunteer peer counselling on rate of mortality, morbidity, and health behaviours in mothers and children in Malawi. Facilitators were guiding the group through community action cycle to tackle maternal and child health problems. Volunteers were also paying home visits five times during and after the pregnancy to provide maternal and neonatal care and support services. The results of the interventions showed a significant reduction in maternal and neonatal mortalities in

which the maternal mortality and neonatal mortalities has decreased by 85% and 48% respectively (Lewycka, Mwansambo, Rosato, et al. 2013:8).

In contrast to the above-mentioned study, a study was conducted in Bangladesh to assess the effectiveness of a community based intervention package in providing limited PNC services by community support systems. Increasing maternal PNC visits from skilled health providers showed that the coverage of limited PNC services by the community support system as well the visit of the women to skilled health providers did not improve. This study showed delivering in health facility has significantly increased the use of PNC services (Islam, Islam, Christophi & Yoshimura 2015:10).

The effect of locally developed mHealth intervention on delivery and PNC utilisation has been studied in Ethiopia. The study was a non-randomised controlled trial implemented in ten health centres. Health workers in the intervention groups were given a phone which sends reminders for scheduled visits during ANC, delivery and PNC. Educational message on maternal and neonatal dangers signs were also send to the clients. This study found out that women who attended ANC in the intervention HC were more likely to deliver at the health centre and women who delivered at the health centre were more likely to receive PNC services at the health centre. The study showed that 41.2% of the women received PNC in the intervention group when it was only 21.1% in the control group (Shiferaw, Spigt, Tekie, et al. 2016:8).

The interventions which have been tried in different countries to improve PNC service utilisation are scant. Therefore, a comprehensive intervention guidelines are required addressing the factors related with PNC service utilisation at facility and at community levels.

3.10 CONCLUSION

This chapter reviewed relevant literatures related with PNC services. It presented the definition of PNC and gave highlights on the health system and strategies of Ethiopia

related with PNC services. It presented the PNC service utilisation in Ethiopia and described the contribution of PNC service utilisation towards reduction of maternal and neonatal mortalities. The priority interventions for maternal and neonatal health care and the factors associated with utilisation of PNC services were also described. Finally, the chapter described intervention strategies aimed at improving utilisation and quality of PNC services. The next chapter will describe the research methodology.

CHAPTER 4

RESEARCH DESIGN AND METHOD

4.1 INTRODUCTION

As outlined in Chapter 1 of the thesis, the objectives of this study were:

- To explore and describe the women's views and experiences on utilisation of PNC service.
- To explore and describe health care workers views and experiences on provision of PNC services.
- To assess the factors contributing or hindering to the utilisation of PNC services.
- To develop guidelines that would contribute towards increasing the utilisation of PNC services.

To address the above-mentioned objectives, this chapter outlined the research design, study population, sampling technique, sample, data collection and data analysis are described.The procedures of ethical considerations are also described. The trustworthiness and the authenticity of the proposed study is also presented.

4.2 RESEARCH DESIGN

Research design is a plan or procedures of conducting the study detailing how to conduct the proposed study by describing the research assumptions and the methods of data collection, analysis and interpretation. The choice of research design depends on the nature of the research problem or issue being studied and on the researchers' experiences on the design and the audiences of the research (Creswell & Creswell 2018:49). According to Yin (2015:83), research design is a "blue print" or logics of research showing the questions to be addressed by the research, the data to be collected

to address the questions, the methods of data collection and data analysis plan of the study to ensure the research has addressed its objective or answer the intended research question. Outlying the research design helps to improve the validity and accuracy of the study.

According to Creswell and Creswell (2018: 43), the first step in research design is to choose the overall approach of the study such as a quantitative that focuses on collecting and analysing numbers, qualitative that focuses on collecting and analysing words and images, or a mixed methods that focus on collecting both quantitative and qualitative data. After choosing the overall approach, the research design follows which is as an overall plan for identifying and selecting participants, collecting the data pertaining to the research questions, analysing the data and writing the report on the findings.

Based on this consideration this study employed a phenomenological study design of qualitative study approach to answer the research questions (Creswell & Creswell 2018:50). According to Yin (2015: 99), phenomenological qualitative study design is employed when the research objectives are to explore and describe a phenomenon, when the answers for the research questions rely on views of participants, when the questions to be asked are broad and general and when the data to be collected consists of largely of words (texts) and when the research objective is to describe the meaning the study participants gave for a certain phenomenon.

4.2.1 THE QUALITATIVE NATURE OF THE STUDY

Measurement in qualitative study is usually focused on taxonomy and classifications rather than counting which is true for quantitative study. A qualitative study answers questions like what is? how does? why? Whereas the quantitative study answer questions like how many? How big? A qualitative study explores the reasons people give for undertaking a certain kinds of phenomenon and by this, it interprets human behaviour. It studies people in their natural setting rather in a certain kinds of artificial environment. A qualitative study also provides range of data collection methods including observing

people in their natural setting, interacting with them in interviews and discussion or reviewing what has been written and documented by the community (Pope & Mays 2013:3). Qualitative research is also described as inductive research and answers questions which starts with what is? And why? (Lyons & Doueck 2010:64).

A qualitative study involves studying the meaning of people's lives in their natural setting. People may be engaged in their daily activities or perform a certain kinds of behaviours or practices without being influenced by the researcher or any outsiders. They can also talk about an issue of their concern without being restricted by predesigned restricted questions and without being in a condition of laboratory kinds of environment (Leavy 2014:2). It explores peoples' experiences and perspectives on a certain phenomenon. The themes or the ideas that emerged during the qualitative data analysis represent the real-life situation and the meaning the participants give for certain kinds of phenomenon not meaning, values or preconception of the researcher. It also explains events or phenomenon through contemporary concepts. A qualitative study also collected data from various sources and triangulate them before reaching into the final conclusion (Yin 2015:11).

As cited in Bazeley (2013:8) the goal of qualitative research can be either of the following:

- To get the meaning given by the participants on the events or situations and also understand their experiences on the actions they are involved in;
- To get insight on the contexts within which a certain action takes place, and the contributions of this context on their actions;
- To understand the process of undergoing a certain kinds of behaviours or actions;
- To identify new knowledge or experiences which have not been identified; and
- To develop causal linkage between different interlinked variables.

Sparkes and Smith (2014:14) define qualitative research as a form of social inquiry that primarily concentrates on interpreting and understanding people's experiences in their natural context.

It also aims at understanding the reality and explore the behaviours, perspectives and experiences on a certain kinds of phenomenon happening on their day-to-day lives. Kumar (2014:24) argues that the primary focus of qualitative research is to describe a situation, phenomenon, event or problem. Walliman (2018:111) also accentuates that qualitative data provides useful information that cannot be reduced to numbers such as people's judgments, feelings, attitudes, and emotions can only be described in words. Therefore, this study employed a qualitative approach of research design to explore and describe the views and experiences of women and health care workers on PNC services and identify factors hindering or facilitating its use and eventually develop strategies aim at improving the utilisation and quality of PNC services in Ethiopia.

4.2.2 DESCRIPTIVE ASPECT OF THE STUDY

The main focus of a descriptive study is to describe a situation, problem, phenomenon, services or programme. It describes the living conditions, attitude or behaviours of the community towards the issue being studied (Kumar 2014:13). Neuman (2014:31) also describes a descriptive research as research which describe an event by giving specific details of a situation, phenomenon, social setting by asking questions like how? and who?

Bloomberg and Volpe (2018:93) state that qualitative study focuses on answering the questions of what and why and is a preferred method to describe and explain the study matter under investigation. It is a method to understand the views and perspectives of the study subjects for a certain phenomenon under investigation. As stated by Walliman (2018:26), the main purpose of descriptive studies is to explain and describe the phenomena or the situations under investigation. A descriptive study gives an overall picture of the phenomenon by describing situations or events. It attempts to answer questions about the given phenomenon.

In this study, the phenomenon or the event under study is PNC service. Using the health belief model as a guiding framework, the following areas are described accordingly:

- The views and experiences of women on PNC services use;

- The perception of women on susceptibility to postnatal care complications;
- Their perception of threat to postnatal care complication;
- The perceived barriers and the perceived benefits of PNC service utilisation; and
- The views and experiences of health care workers on PNC services.

4.2.3 EXPLORATORY ASPECT OF THE STUDY

As described by Creswell and Creswell (2018:162), exploratory qualitative research is conducted if there is insufficient information on the topic under investigation and the researcher's main aim to assess the complex factors surrounding the phenomenon under investigation. Similarly, Neelankavil (2015:105) described exploratory research as a design which usually employed when the research objective is to get insight on the participants' attitude and perceptions towards the phenomenon under investigation. This research design is useful when there is no enough relevant information about the research topic. Neuman (2014:30) also asserts exploratory research is conducted on topics that has not yet been described or known in detail. It seeks to understand the phenomenon under investigation in its totality from the study participants viewpoint or frame of reference.

This study explored the reasons why PNC service utilisation is very low in Ethiopia from the viewpoint of the women and the health care workers. In-depth interviews were conducted among those women who utilised PNC service, who did not utilise PNC service, and from health care workers working at different level of the health systems. This helped the researcher to develop guidelines that would improve the utilisation and quality of PNC services.

4.2.4 CONCLUSION ON THE STUDY DESIGN

This study focused on the views and experiences of women and health care workers on PNC services. In choosing the research design, the researcher took into consideration the necessity of getting thick description on the perception, views and experiences of

women on PNC services as well as the views and experiences of health care workers on the provision of PNC services. To get answers for such kinds of question, it is necessary to describe and explore the views and experiences in the context where the women lives and where the service providers provide the services. It is obvious that to understand what is going on regarding PNC services and to get insight on why women are less likely to utilise the services, there is a need of interviewing women who utilised and did not utilise postnatal services. Equally important is to get data from the health care workers who are the direct caregivers of PNC to understand their views and experiences on PNC services. Using the descriptive and exploratory qualitative study design, the researcher established the views and experiences of women and health care workers on PNC and developed guidelines that will improve its quality and utilisation.

4.3 RESEARCH METHODS

Research methods are a variety of tools that are used in different kinds of enquiry. It is like the tools that are used to perform certain kinds of practical jobs. They are techniques used to conduct research and provide tools that are used to collect and analyse data and finally come to a certain conclusions (Walliman 2018:53). Methods are also described as a tool used by researcher to investigate the problem or to find out information that will answer the research questions (Polit & Beck 2014: 39). The research method section of a study contains the detailed process taken to collect the data. It usually begins with description of study subjects, data collection instrument, data analysis techniques and other administrative procedures utilised in the study (Creswell & Creswell 2018:40).

Based on the above-specified descriptions of research methods, the subsequent sections give details on the study population, sample, data collection and data analysis that was used in this research undertaking.

4.3.1 STUDY AREA SETTING

This study was conducted in South West Shoa Zone of Oromia Region of Ethiopia. This region is the most populous region in Ethiopia consisting of 37.4% of the Ethiopian population. According to the projection made from the 2007 Ethiopian census, the total population of the Oromia Region in 2016 was 34,575,008. The region has 18 administrative zones and 310 administrative districts.

South West Shoa zone is one of the 18 administrative zones of the region with a total population of 1,173,363 million. The zone has 11 administrative districts and one town administration. They include Goro district, located at 15 km south of the zonal town and Wolisso Urban district, located at the centre of the zone are among the 11 districts found in the zone. There are 58,301 and 54,986 people living in Goro and Wolisso Urban districts, respectively.

The zonal town, Wolisso, is located at 120 km south of Addis Ababa. In total, the zone has one zonal hospital, one NGO hospital, 48 health centres, and more than 200 health posts. In the districts where this study is going to be implemented, there are six health centres and 21 health posts providing curative, preventive, promotive and rehabilitative services to the community.

4.3.2 POPULATION AND SAMPLING

4.3.2.1 Study population

Study population is a collective term consisting of the total quantity of things which are the subject of the study. It can consist of objects, organisation, people or events to be studied (Walliman 2018:144). Polit and Beck (2014:89) also define a population as a set of persons, objects, or phenomena about which researchers wish to learn and the population elements as the individual persons, objects, or phenomena. Babbie (2017:202) posits that the definition of population is different for different studies depending the research objective.

If we take definition of population in the day-to-day lives, it means all people living in a given country. However, for research purpose, a population is a group of people the researcher would like to make statement about.

Based on the above definition and description of study population, the following are the study population for this study: women who gave birth in the past six months; health extension workers; midwives providing PNC services at the health facilities, health centre heads and; zone and district health officials coordinating maternal and child health services.

4.3.2.2 Sample and sampling

According to Neuman (2014:166), sampling is a strategy used to select study subjects from a population whereas sample is a subset of the population that results from a sampling strategy. A sample is a subgroup of a population that participates in a study and provides data for the study (Clark & Creswell 2015:234). The subsequent section describes the sample and the sampling strategies employed under this research undertaking.

4.3.2.2.1 Sampling of study sites

The study site was selected purposively. As described by Dhivyadeepa (2015:105), purposive sampling relies on the judgment of the researcher to select the study units to be studied. Salazar, Crosby and DiClemente (2015:165) put purposive sampling as a technique that is targeted and specifies pre-established criteria for recruiting the sample. Yin (2015:93) postulates that in qualitative research, statistical representativeness is not normally needed. Therefore, this study used purposive sampling technique to select the study sites.

Oromia regional state is selected purposively because according to EDHS 2015 the region's postnatal coverage is the lowest in Ethiopia next to Afar region where only 8.4% of women underwent PNC check-up in the first two days of delivery (Central Statistical Agency of Ethiopia & ICF International 2016:154).

South West Shoa Zone of Oromia Region is selected because it is one of the 18 zones in the region and is one of the lowest performers in PNC service provision. Wolisso Town is purposively selected as the proportion of women who received early PNC in the town is the lowest in the zone at 30%. Goro District is also purposively selected as it is one of the district in the zone having four health centres providing services including PNC services to the community, but only 40% of the women were reported to receive early PNC services (Federal Ministry of Health Ethiopia 2015/16:195).

There are two primary health care units (PHCUs) under Wolisso Town woreda health office and four PHCUs units under Goro District health office. In Goro woreda one, PHCU consists of one health centre (HC) and five health posts (HP) whereas in Wolisso Urban woreda the PHCU is composed of two health centres only. All of the health centres in these PHCUs (six health centres) and one 1 HP per HC (total 4 HPs) are included in this study. As there are no health posts in Wolisso Town, the health extension workers reside in the health centres. For more information about sampling of the study sites, please see fig. 4.1

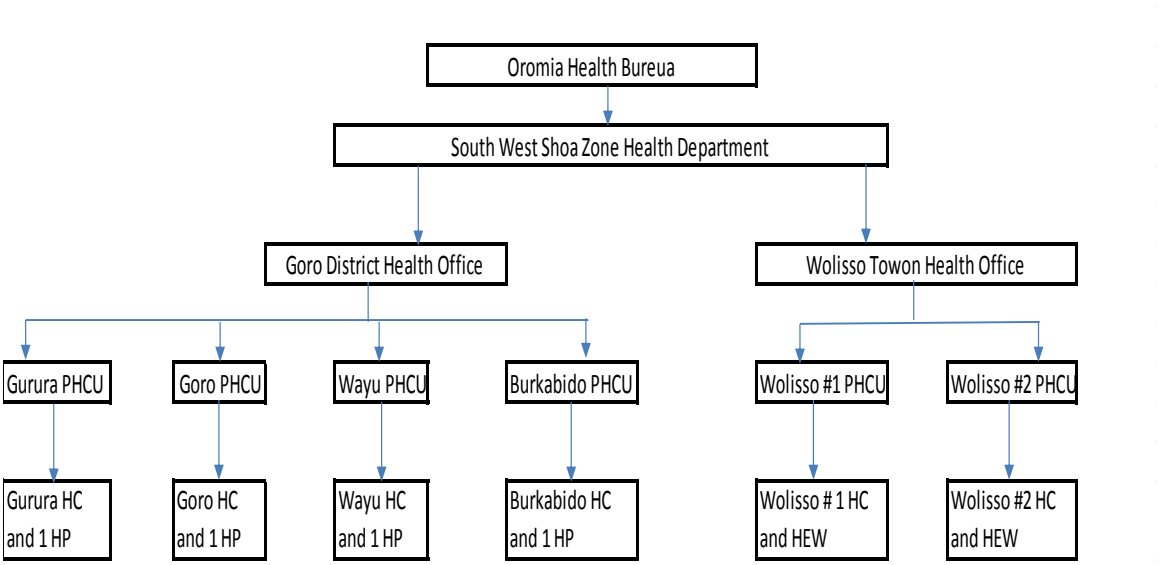


Fig.4.1 Multistage purposive sampling employed in the study

4.3.2.2.2 Sampling of study subjects

Purposive sampling was used to select the following study subjects:

- Recently delivered women;
- Health extension workers;
- PHC Units directors;
- Midwives working at the health centres at the time of data collection;
- District health office heads;
- District health office maternal and youth reproductive health technical officers;
- Zonal health department head; and
- Zonal health office maternal and youth reproductive health technical officers.

Purposive sampling technique was used to select women who delivered in the past six months. This sampling technique is used in qualitative data collection to make sure that the data are obtained from individuals who have experienced the phenomenon under investigation (Clark & Creswell 2015:332).

Polit and Beck (2014:236) also assert that sampling in qualitative study is usually purposive to make sure that the knowledge, meanings and perspectives held by the study participants are explicitly identified and described. Less than six-month period is taken to limit possible recall bias owing to time lapse.

Women who delivered in the past six months and utilised PNC services in the selected health centres were identified from the PNC register. The midwives in charge of providing PNC services contacted the women and explained the purpose of the study and identified if they were willing to participate in the study. Once the women agreed to participate in the study, the researcher paid a visit to her house and conducted the interview. This method was found to be convenient as it might have been difficult to wait for mother who might come to the health centre for PNC as the service utilisation was very low in the area.

Purposive sampling was also used to select those women who did not utilise PNC services. Health extension workers identified and contacted them to discuss on the purpose of the study and to find out if they were willing to participate in the study. Such kinds of purposive sampling technique is supported by scholars describing purposive sampling as a non-probability sampling procedure in which the study elements are selected from the target population on the basis of their fit with the purpose of the study (Daniel 2012:87).

Health extension workers working in the selected health posts who had more than one year of experiences in delivering services was included in the study. The experiences and views of them on PNC service provision were explored. The head of the selected primary health care was identified and included in this study purposively as he/she is believed to have knowledge and experiences on the PNC services provided in the health facility and the services provided in the PHC unit in general. In addition, midwives who provide PNC services and head of the MNCH case team in the selected health centres were included purposively as they are responsible for providing PNC service and manage the maternal health services.

The head of the selected district health offices who are responsible to manage and coordinate PNC services, was purposively included in the study. In addition, the district health office's maternal and youth reproductive health technical officers were selected as they are responsible to supervise and support PNC services in the districts and presumably have the knowledge and experiences on PNC services provided in the districts.

4.3.2.2.3 Sample size

According to Polit and Beck (2014:238), sample size is the number of study participants. Unlike quantitative studies, qualitative studies use non-probability and non-random samples. In addition, the sample size in qualitative study is rarely determined in advance in which the researcher has limited knowledge about the larger group or population from the which the sample is taken (Neuman 2014:166). Furthermore, Patton (2014:244) asserts that there are no hard rules for sample size calculation in qualitative study. The sample size depends on what the researcher would like to know, the purpose of the study, the judgment of the researcher on who will have reach information on the phenomenon under investigation, the credibility of the data collected, and time and other resources available for the research.

The sample size in qualitative study is determined based on the information collected during the data collection period. As described by Flick (2014:138), the decision to stop taking more samples into the study depends on the theoretical saturation of the data which means no additional data are being found from the study subjects. Corbin and Strauss (2015:157) also suggest the selection of further samples into the study stops if a researcher determines that the data offer sufficient depth and breadth of understanding about the phenomenon under investigation and the relationship between variables in the study have been made clear. For this study the data collection stopped after the ninetieth (19) women and after the twenty-fourth (24) health care workers when theoretical saturation was reached.

Therefore, the sample size for this study was determined by the saturation of information during the data collection period.

4.3.2.2.4 Inclusion and exclusion criteria

Women who gave birth in the past 6 months, residing in the study area, were able to communicate and willing to participate in the study were included. Health care workers who were directly involved in the provision of PNC services or responsible to coordinate the overall MNCH services and willing to participate in the study were included.

4.3.3 PILOT STUDY

Walliman (2018:286) defines pilot study as small-scale trial run of a research interview or observation. Pilot studies are important to ensure that the interview questions can illicit useful information so that adjustment can be made before conducting the actual data collection (Neuman 2014:203). Pilot testing is a small-scale version of the survey research to test the study items in a likely survey respondents. This small scale should include the full range of the likely respondents. Pilot testing can fit with focus group, in-depth interview or one-on-one interviews (Salazar et al. 2015:388). Trolley, Ulin, Mack, Robinson, Succop (2016:123) pointed out that pilot studies are important for the researcher to test the interview or focus group guides on a study participants similar to the participants in the actual study.

A pilot study was conducted in one district health office which is not part of the selected districts for this study. The district health office head, the district maternal and youth reproductive health technical officer was interviewed at district level. One health centre in this district was selected and the PHCU head, the maternal unit head, the midwife working in this health centre was interviewed. One health extension worker was also identified and interviewed. In addition, one recently delivered women who did not utilise PNC service and one woman who utilised PNC service was also interviewed. All necessary

adjustment on the interview questions and on the overall approach of the questions were corrected as deemed important.

4.3.4 DATA COLLECTION

4.3.4.1 Data collection approaches, methods and processes

Data collection is defined as a process of gathering data from the various data sources (Clark & Creswell 2015:337). Qualitative research focuses on collecting data from few participants to get a deep understanding of the study topic. The study participants in a qualitative study are usually selected purposively to get detailed information on a study under investigation. Qualitative research does not begin with a predesigned study questions for specific variables. In contrast, qualitative researchers gather data in the form of text or images by asking a few open-ended questions to encourage participants provide their own views and experiences on the study under investigation. Questions can be added or elaborated as new ideas and insights emerge during the data collection (Clark & Creswell 2015:64).

The choice of a method of data collection depends on the research questions and the nature of the problem or setting. There are three major data collection methods in qualitative study that can be utilised to collect detailed data on participants views and experiences on the phenomenon under investigation, these are: observation, including study of existing documents; in-depth interview; and focus group discussion (Trolley et al 2016:41). The current study used the individual-in-depth interviewing technique of data collection to gather information on views and experiences of women and health care workers on PNC services. This data collection technique helped the researcher to explore individual belief, experiences and personal information (Clark & Creswell 2015:339).

4.3.4.2 Individual in-depth interviews

Interviewing is a means of data collection to get information about abstract things which cannot be observed such as thought, intentions and feelings. An interview is a form of forwarding questions by one person and answering by another person. Individual in-depth interview is the preferred method of data collection when the purpose of the research is to explore personal, sensitive, taboo, and cultural-related matters (Leavy 2014:289). The quality of data to be collected by interviews largely depends of the skill of the interviewer to probe and gather more information and also on the quality of the interview guides (Patton 2014:340).

Interview guide list out topics or subjects in a general form that are going to be forwarded to the respondent. The researcher is free to probe and ask different questions around the topic on the course of the interview. An interview schedule has also been described as a framework of guiding topics within which the interviewer ask probing questions around them. More importantly, an interview guide helps the researcher to present the same kinds of topics or subjects of discussion to different respondents. It also helps the respondents to freely talk about their perspective and experiences on the issue raised (Patton 2014:343).

Patton (2014:341) described three kinds of interviewing approach: the informal conversational interview, the general interview guide approach, and the standardised open-ended interview. The informal interview conversational interview is usually conducted without the knowledge of the interview of being interviewed. It follows the natural flow of communication with the person with spontaneous generation of questions about the point of interest. The general interview guide approach involves outlining the issues to be raised during the interview and to make sure that they are addressed during the discussion. On the contrary, the standardised open-ended questions list out the specific questions to be raised to the respondent during the interview.

The researcher conducted individual in-depth interview using semi-structured guiding questions with the health authorities, PHCU directors, PNC service providers, health extension workers, women who utilised PNC service and women who did not utilise PNC

services to assess their experiences and views regarding PNC services (see Annexures H and I).

4.3.4.3 Development, testing and characteristics of the interview guides

Open-ended questions which allow flexibility and exploration of more information was used to collect data. The main interview guide was followed by follow-up and probing questions addressing the objective of the study was developed and used for the purpose of getting reach information on the topics raised. The interview guides were developed by reviewing literature and consulting experts on maternal and child health services.

The semi-structured interview guide was first developed in English and then back translated into Oromifa (the local language) for easy communication with the study participants. The major question that was raised to the zone and district health authorities was about their experiences in managing and coordinating PNC services. The PHCU directors, the PNC service providers and the health extension workers were asked about their experiences and views regarding PNC service quality and utilisation. Women who utilised and did not utilise PNC services was asked about their experiences and views of utilising PNC services.

4.4.3.4 Data collection process

All the necessary preparatory work was undertaken to collect the data. The interview guide was prepared and individuals who assisted the data collection process and had experiences in qualitative data collection were utilised. The research protocol secured ethical clearance letter from UNISA as well as from Oromia Health Bureau Research Ethics Review Committee. The South West Shoa Zone Health Department also gave the support letter for the data collection. All the necessary logistics for the data collection was prepared.

Before the actual data collection, training was given to the two research assistants who assisted the data collection process. These research assistants had experience in qualitative data collection. The research team was introduced with the head of South West Shoa Zone Health Department, South West Shoa Zone health office maternal and youth reproductive health technical officers, district health office maternal and youth reproductive health technical officers, heads of district health offices HEWs, PHCU directors and midwives. Semi-structured individual in-depth interviews were conducted in Oromifa or Amharic languages whichever the participants preferred. The interview was conducted in venues convenient to the participants.

The recently delivered women who utilised and did not utilise PNC services was identified from the PNC register of the health centres and was contacted by the health extension workers to check if they were willing to participate in the study and for possible date of interviews. With all of the study participants, a written consent form was signed before data collection began. The interview was audio recorded and field note was also taken.

4.3.5 DATA ANALYSIS

Qualitative data analysis focuses on analysing textual data which can be collected by conducting in-depth interview, focus group discussion, or through observations. It mainly focuses on identifying the main theme from the body of description through stepwise approach. Data reduction or collapsing, description and/or interpretation are the main tasks throughout the qualitative data analysis. Therefore, identifying the main themes and interpreting the data may require the researchers to move back and forth from collection to analysis and back again, refining the questions they ask from the data and analysing the data in parallel with the data collection exercise. Neuman (2014:342) also describes qualitative data analysis as the process of identifying repeated behaviours, objects or body of knowledge from qualitative data which come in the form of photos, written words, phrases or symbols. Once the repeated patterns are identified, it is interpreted in terms of social theory, conceptual framework, or the setting it in which it occurred.

According to Trollye et al (2016:144), qualitative data analysis includes five interrelated steps and its major aim is to identify similarities and differences in the body of texts collected from different individuals and sources. In all the steps and the processes, the researcher identifies the meaning of thoughts, feelings and behaviours in the texts and for doing so inductive analysis is suggested in which the data lead to the emergence of concepts and theories. This study used the thematic data analysis techniques which focuses on giving codes to transcripts by going through them line by line, categorising alike and related codes together to form categories and then develop and describe themes that represent the group of categories (Sparkes & Smith 2014:124).

Qualitative data related with experiences and views on PNC services using in-depth interview techniques were collected from women who utilised and did not utilise PNC services. In addition, interviews were conducted with PNC service providers, health extension workers, head of health centres, district and zone MNCH service coordinators to get their experiences in providing and coordinating PNC services. The audio records and the field notes were fully transcribed and analysed as soon as possible following the interviews. This helped the researcher to make necessary adjustments for the subsequent interview. The researcher translated the Oromiffa transcripts into English verbatim. The researcher's colleague who fluently speaks both English and Oromifa checked the consistency between the Oromiffa transcripts and its English version. The participation of the researcher in the translation process helps to familiarise with the emerging concepts and themes.

The analysis of the transcribed data was assisted by computer software developed for analysis of qualitative data which helps the annotation, coding, sorting, and other required manipulation of the data and store a record of all these activities (Flick 2014:281). Specifically, the researcher used Atlas.ti qualitative data analysis software owing to the fact that its powerful capability in analysing vast amount of textual data and also is provided for free from Unisa Akaki Campus. The interview conducted with the health care

workers took 25-30 minute while the interview with the women participants took 35 to 40 minute.

Steps in data analysis

This study followed the six steps of inductive thematic data analysis techniques that describe data in rich detail through identifying, analysing and reporting themes within data following a bottom-up approach. The phases described in the inductive thematic analysis are just a guide for the analysis and there is no hard and fast rule to follow one step from the other. Going back and forth in the phases is also a possibility depending on the need (Polit & Beck 2014:230).

Step 1: Familiarising yourself with your data

The first step in the analysis of qualitative data is to immerse oneself into the data through reading and rereading the transcripts and the filed notes. This step starts from the very first day of data collection. It helps the researcher to get familiarised with the content of the transcripts as well as get acquainted with the concepts embedded in the text. It also helped the researcher to get an insight on the quality of data being collected and see whether the data being collected are sufficient for an empirical analysis. If there are problems on the data being collected, necessary adjustments can be taken on the questions and on the way questions are asked. In addition, during this phase, the researcher conceptualised ideas about the kinds of categories and themes to emerge (Trolley et al 2016:145). Polit and Beck (2014:372) also stated that a thorough reading of the transcripts and the filed notes is the primary step of qualitative data analysis which will help the researcher to tries to understand the depth and the breadth of the data collected.

Step 2: Generating initial codes

Coding involves a line by line reading of the transcripts to identify concepts and assign words or phrases that represent the concept. These words or phrases can be directly taken from the text which is called in vivo coding, or it is directly based on the data. These initial codes can also be revised or modified over the period of analysis (Walliman 2018:194). Similarly, a code is also described as a word or short phrase that summarises or captures the main essence of the transcripts (Saldana & Omasta 2017: 181).

Step 3: Searching for themes

Thematic analysis starts in Phase 3 when all data have been initially coded and collated, and the researcher has obtained a long list of the different codes you have identified across your data set. During the development of themes, other sub-themes can emerge. Those sub-themes which cannot be collated into one big theme could become a different theme.

Step 4: Reviewing themes

This stage starts once we finish producing the initial themes. Themes will be revised here to make sure that the codes described under each theme actually fits in that specific theme. On this stage, big themes can be divided to make two or more themes. Additional sub-themes can also be developed within a theme. Codes which are identified not fit in that theme will be placed in other suitable themes or they can form sub-themes and theme by themselves. On this stage, all themes will also be revised to make sure that they actually represent the data set. If not, recoding and redeveloping of themes will follow. Once we finish reviewing the themes and sure about the themes represent the data set, Phase 5 will commence (Saldana & Omasta 2017:319).

Step 5: Defining and naming themes

On this stage the themes developed are described on what each of them is about and what aspects of the data each captures. This stage also requires going back to the collated data to make sure that they can be fit in within the theme. In the end, the themes can be refined to tell the readers concisely on what they are bout (Saldana & Omasta 2017:319).

Step 6: Producing the report

This stage focuses on writing the story of the data set contained in each theme in a plausible way without losing track on the actual meaning of the data. To support the story the data convey, enough excerpts should also be reported to support the analysis. On this write up phase, the researcher also describes his argument about the findings in relation to the research objective and give meaning and interpretation to the collated codes in each theme (Sparkes & Smith 2014:126).

4.4 ESTABLISHING TRUSTWORTHINESS

The quality of quantitative study is judged by assessing its objectivity, reliability, generalisability, and validity. However, as the ontology and epistemology of qualitative research is different from quantitative research, this approach of checking the quality of the data is not valid. The golden standard way of judging the quality of qualitative research was first developed by Lincoln and Guba who gave a parallel criterion of credibility, transferability, dependability and confirmability for internal validity, external validity, reliability and objectivity (Saldana & Omasta 2017: 367). These collectively are called trustworthiness criteria that can be used for judging the quality of qualitative research. Accordingly, the researcher followed this criterion to ensure the quality of the study.

4.4.1 DEPENDABILITY

Dependability is one of the criteria of checking the trustworthiness of the qualitative research. For the purpose of ensuring dependability, the researcher should document all the process of the research activities including the path of their research and decision-

making processes. Readers of the research work can audit the research work by following the path of the research and make their own judgments (Sparkes & Smith 2014:181). As described by Polit and Beck (2014:397), dependability focuses on auditing the research work to give judgment on the soundness of the conclusion made on the research.

This entails looking at the methodology followed, how the data collected and the adequateness of the analysis done by following the research path. The researcher documented all of the paths followed in the undertaking of the research work promoting dependability of the research work. All the data collected, the transcripts, the codes generated and the themes developed were reviewed by the supervisor of this study.

4.4.2 CONFIRMABILITY

Confirmability of a qualitative research is the extent in which the data, the interpretation and the conclusion made are actually based on the data collected and not biased outcome of the researcher's subjectivity. One of the strategies to ensure confirmability of the study is to publicise the data collected, the code generated and all the research paths so that judgment can be made on the overall quality of the research (Sparkes & Smith 2014:181). Polit and Beck (2014:397) also describe confirmability as one of the means of ensuring the quality of qualitative research by which the readers can make sure that the codes and themes developed and the conclusions made on the research are based on the data not influenced by researchers' preconception or interest. Holloway and Wheeler (2010) further posit that all the paths of the research should be documented properly so that readers can trace back the sources of the data and give their own judgment on the quality of the research. Accordingly, the researcher documented all of the paths of the research and publicised the transcripts, the codes and the themes to promote the confirmability of the study.

4.4.3 TRANSFERABILITY

Transferability is concerned with whether the study findings cab be generalised to the larger population. On this regard, to create a good opportunity to the readers to make judgement on whether the findings can be applied elsewhere or not, it is suggested to give a thick description of the data so that readers get wider information to make their own judgment (Sparkes & Smith 2014:186). If a study is transferrable, that means the findings and the knowledge gained in the research can be applied in a similar context or situation. One of the strategies of making the research findings transferrable is to provide thick and detailed descriptions of the research path and the findings (Creswell & Creswell 2018:290).

To ensure transferability of the study, the researcher provided detailed descriptions of the methodology used in this study. Data were collected from multiple sources to enrich the descriptions and improve the reliability of the data. The data collected and the analysis made was reported in detail to make sure that the readers get full picture of the study and make their own judgment regarding transferability of the study findings.

4.4.4 CREDIBILITY

Credibility is one of the criteria of judging the trustworthiness of a qualitative research. It focuses on assessing how much the findings of the study are accurate from the point of the study participants, the researcher and the readers/evaluators (Creswell & Creswell 2018:274). Credibility of qualitative study is concerned about the truthfulness of the study findings (Polit & Beck 2014:397). To ensure credibility of the study, the following strategies are suggested: prolonged engagement, triangulation, peer debriefing, negative case analysis, and member checks (Sparkes & Smith 2014:189).

Prolonged engagement

Prolonged engagement of the researcher in the study area and with the participants helps him/her to understand more their culture, language, or views of them. It will also help him to collect adequate information until the data being collected no longer generate new

information (Polit & Beck 2014:398). This strategy is also echoed by Creswell and Creswell (2018:275), suggesting that prolonged engagement of the researcher with the study participants provides a good opportunity to the researcher to understand and describe more about the phenomenon under investigation and thereby ensure credibility of the study. The researcher for this study took sufficient time in the field to collect adequate data from the study participants and collected data until no new information emerged from the interview.

Triangulation

Triangulation means collecting information about the phenomenon under investigation from multiple sources and minimises biases which may arise from using only one type of methods, one observer and one theory. Triangulation helps to get a complete picture of the phenomenon under investigation. There are four types of triangulation (data triangulation, investigator triangulation, method triangulation, and theory triangulation). Data triangulation encompasses data collection at different times (time triangulation), from multiple sites (space triangulation), and from different persons at different levels (persons triangulation). Method triangulation is about the use of different kinds of data collection methods whereas theory triangulation is the use of different perspective to interpret the data (Polit & Beck 2014:399).

The researcher used three of the triangulation methods, namely, data triangulation, method triangulation and theory triangulation. For data triangulation the data were collected for extended period of time from health authorities coordinating MNCH services at the zone and district levels, from PHCU directors, from midwives providing PNC services and from health extension workers who are supposed to provide home-based PNC services. Women who received and did not receive PNC services were interviewed. The districts chosen for this study include urban and rural settings fulfilling space triangulation. Regarding method triangulation, interview transcripts and filed notes were used to check the convergent of the findings. As to theoretical triangulation, the researcher consulted different literatures.

Peer debriefing

Peer debriefing is one of the strategies of ensuring the quality of qualitative researches. In peer debriefing, the researcher gathers experts including individuals who have had experiences on the phenomenon under investigation and on the methodology utilised. During the debriefing, the data collected, the codes generated and the emerging themes were presented to the expertise and the discussion focused on identifying any biases during the data collection, giving judgment on richness of the data collected to answer the research question, and identifying errors introduced during the interpretation of the data (Polit & Beck 2014:404).

Accordingly, the researcher involved expertise on the area of PNC and expertise on qualitative study to give feedback on the data collected, the analysis and the interpretation made. Based on their feedback, all necessary measures were undertaken.

Negative case analysis

One way of the strategy of increasing the quality of qualitative research is to point out and describe experiences, opinions or other feelings of the participants which are peculiar and different from the majority of the participants. This strategy, which is called negative case analysis, helps to refine the theory and description made in the research. In addition, describing contradictory views and ideas will also increase the credibility of the research work (Leavy 2014:552). Hence, the researcher provided a thick description of contradict ory ideas and views.

Member check

Member check means reviewing the themes developed and the interpretation made together with the study participants to ensure that the result and the conclusion made actually represent the reality and their experiences. If there are errors made on the themes or on the interpretation made, all necessary measures should be taken (Clark &

Creswell 2015:364). Polit and Beck (2014:401) also describe member checking as one of the strategies of ensuring the trustworthiness of the study. Member checking can be done either by presenting the transcript of the interview to the participants and ensure all utterances are captured. But, these kinds of checking are disliked by the participants most of the time. However, member checking can be done by presenting the themes and the summary of the findings and get the feedback of the participants on their judgment about the validity of what has been presented.

In this regard, the researcher of this study created an opportunity for the study participants to give feedback on the themes and the interpretation made and made sure all the feedbacks given are incorporated.

4.5 ETHICAL CONSIDERATIONS

All qualitative studies are governed by ethical standards which are defined as a standard of conducts based on moral principles. The moral principles in ethical standards are described as principles regulating the interaction with human beings (Goodyear, Jewiss, Usinger & Barela 2014:217). Neuman (2014:69) highlights that research ethics addresses moral concerns and standard of professional conduct in research that are under the researcher's control. Research ethics is also described as a tool to balance the pursuit of knowledge for the research side and ensure the study participants' self-esteem and dignity is respected and their privacy and democratic freedoms are ensured (Neuman 2014:69).

4.5.1 PERMISSION TO CONDUCT THE STUDY

Ethical clearance was obtained from Unisa Department of Health Studies Higher Degrees Committee and Oromia Health Bureau Research Ethics Review Committee (see Annexures A and B). The Unisa Ethiopia learning centre has also written a support letter to Oromia health bureaus asking them for their cooperation in the process of ethical clearance and data collection. The South West Shoa Zone Health Department and the

two districts where this study was conducted have also allowed the collection of the data taking the ethical clearances obtained from the regional health bureau (see Annexure D).

4.5.2 INFORMED CONSENT

Informed consent is central to ethical research practices. It entails the openness and disclosure of the research objectives and methodologies to the research participants. Furthermore, informed consent is also described as a central features of research ethics in which the study participants are fully informed about a research project before they participate into the study. Informed consent requires the researcher to give information about the research study and the participants understand the information and participate in the study based on their will with coercion. In addition, informed consent respects persons and their autonomy (Resnik 2018:115).

Written informed consent was obtained for all study participants. Data collectors first explained the study and its associated procedures, risks, and benefits to each study participant. All women were asked for their written consent before continuing with data collection. The consent form was translated into Oromifa and back-translated to assure accuracy (see Annexures E,F,and G). The participants also received a copy of the informed consent including the name, phone number, and address of key contacts including: the researcher and the Oromia Regional Health Bureau Ethical Review committee office. Data collectors signed indicating that they have read the informed consent text to the participant and sign again to verify that the participants provided their consent. All signed consent forms was stored in a locked file cabinet and separate from data.

4.5.3 PROTECTION OF PRIVACY AND CONFIDENTIALITY

Keeping the privacy and confidentiality of all the data collected and information generated is one of the pillars of research ethics. This can be ensured by not linking texts and descriptions to the names or other identification of the participants. The participants should be reassured about this and also the researcher should invite the participants if

they would like to rephrase or restate what they have said. This helped the participants be reassured on the confidentiality of the study (Resnik 2018:149).

Data collection activities were conducted in a private area where it cannot be overheard. To ensure confidentiality, participants were offered the opportunity to suggest an alternative location for the data collection activities. All data collection materials, including consent forms, field notes, voice records and other materials generated as part of data collection activities were logged and maintained in a locked file cabinets except when in use. Access to the locked file cabinets containing data was limited to the researcher. All electronic data files were password-protected and maintained only on the researcher's computer or on back-up disks kept in the locked file cabinet. All the data collected will be kept for 5 years and then disposed confidentially.

4.5.4 DESCRIPTION OF RISKS AND POTENTIAL BENEFITS

Resnik (2018:170) asserts that researchers should ensure that harm and discomfort which can be in the form of physical, emotional, social or financial should be minimised and participants must not be subjected to unnecessary risks of harm or discomfort.

Participants in this study faced no physical risks. Participants may be asked sensitive questions concerning pregnancy, delivery and mortality. The data collectors were trained in procedures to ensure informed consent and to protect confidentiality of participants. They explained to eligible participants the basic purpose and conduct of the study, including confidentiality procedures and the right to refuse or withdraw at any time. Furthermore, every effort was made to protect the privacy of participants. Participants had the right to refuse participation, as well as to express their ideas openly with the researcher. Finally, the findings from this study were presented in the aggregate.

Efforts were made to avoid identification of subgroups in any analysis or presentation of the findings. This aspect of data collection is expressly stated in the consent form. There are no direct benefits to participants in this study. Some women may find that talking about their experiences during pregnancy and delivery may help them better understand what services are actually available to them or other women.

4.6 CONCLUSION

This chapter described the research design, the descriptive and explorative nature of the study, and the methods of data collection, data analysis, trustworthiness, and ethical considerations of the study. The descriptive and explorative research design was used to explore and describe health care workers as well as women experiences and views on PNC services. The study was conducted among women who recently gave birth and utilised and not utilised PNC services, HEWs, PHCU directors, midwives, district health office maternal and youth reproductive health technical officers, heads of district health offices, zonal health office maternal and youth reproductive health technical officers and heads of zonal health office. Semi-structured in-depth interviews were used to collect the data. The inductive thematic analysis approach was used to analyse data, using the qualitative data analysis software, Atlas ti version 8.0. This chapter also described the ethical requirements of the study and steps taken to ensure trustworthiness of the study. The next chapter will present the findings of the study.

CHAPTER 5

ANALYSIS, PRESENTATION, AND DESCRIPTION OF THE RESEARCH FINDINGS

5.1 INTRODUCTION

This chapter presents the research findings on the in-depth interview conducted with women and health care workers on the experiences and views on PNC service utilisation. The biographical data of the women and the health care workers are presented first. The emerged themes and categories are presented subsequently.

5.2 DATA MANAGEMENT AND ANALYSIS

The study employed an inductive thematic data analysis approach to describe and explore the experiences and views of women and health care workers on PNC service utilisation. The analysis included a total 19 in-depth interview with women who had delivered in the past six months and with 24 health care workers working at different levels of the health system. All the interviews conducted in Amharic were transcribed by an experienced translator and reviewed by the researcher while listening to the original audio content. For the interviews conducted in Oromiffa, an experienced public health expert in conducting in-depth interviews reviewed the transcriptions while listening to the original audio content. Each of the transcripts was also compared to the field notes collected.

After a thorough, initial reading of the transcripts which was meant to acquaint the researcher with the concepts embedded in the transcripts, the researcher went through each transcript and inductively assigned codes to sections of texts. Atlas ti version 8 qualitative data analysis software was used to facilitate all aspects of data management and coding. Some codes were in vivo using and the rest were based on subjective assessment of the best encompassing descriptor of the concept embedded in the transcripts.

5.3 BIOGRAPHICAL PROFILE OF THE PARTICIPANTS

The profile of the women and the health care workers who participated in the in-depth interview are described below.

5.3.1 CHARACTERISTICS OF THE WOMEN WHO PARTICIPATED IN THE STUDY

A total of 19 women participated in the study. All of them gave birth in the past six months. Their background information including age, marital status, religion, employment status, educational status, gravidity, parity, and place of delivery in the last pregnancy are depicted in Table 5.1 below.

The majority of the study participants were in the age range of 25-29. Most of the study participants followed Islamic religion. All of the participants were married. Only three of the study participants utilised PNC services.

Table 5 1: Characteristics of the women who participated in the study

Participants code	Age	Place of delivery	Received PNC	Religion	Marital Status	Education	Employment	Gravidity	Parity
P1	18	Home	No	Muslim	Married	Grade 4	No	II	II
P2	20	Home	Yes	Muslim	Married	Grade 2	No	III	III
P3	20	Home	Yes	Muslim	Married	Illiterate	No	I	I
P4	22	Home	No	Muslim	Married	Grade 8	No	II	II
P5	23	Home	No	Muslim	Married	Illiterate	No	III	III
P6	24	Facility	No	Christian	Married	Illiterate	No	III	III
P7	25	Facility	No	Muslim	Married	Illiterate	No	IV	IV
P8	25	Facility	No	Muslim	Married	Grade 1	No	VI	VI
P9	25	Facility	No	Christian	Married	Grade 10	Yes	I	I
P10	25	Facility	No	Christian	Married	Grade 8	No	II	II
P11	26	Facility	No	Muslim	Married	Grade 1	No	IV	IV
P12	27	Home	Yes	Muslim	Married	Grade 5	No	V	V
P13	29	Facility	No	Christian	Married	Grade 10	Yes	I	I
P14	30	Facility	No	Muslim	Married	Illiterate	No	V	V
P15	32	Facility	No	Christian	Married	Grade 2	No	IV	IV
P16	34	Facility	No	Christian	Married	Illiterate	No	III	III
P17	35	Home	No	Muslim	Married	Illiterate	No	VIII	VIII
P18	35	Facility	No	Christian	Married	Grade 4	No	IV	IV
P19	36	Facility	No	Christian	Married	Grade 4	No	II	II

5.3.2 BIOGRAPHICAL PROFILES OF HEALTH CARE WORKERS PARTICIPATED IN THE STUDY

The biographical profile of the health care workers who participated in the study are depicted below. A total 24 health care workers drawn from different levels of care were interviewed. The individual interviews captured the participants' profile such as age, sex, profession, position held in the health facility, and number of years of service. As shown in Table 5.2, the majority of the study participants had 4-6 years of experience.

Table 5 2: Characteristics of the Health Care Workers participated in the study

Participants code	Age	Sex	Profession	Position held	Service year
HCW1	21	F	HEW	HEW	2
HCW2	25	M	HO	Head of the HC	3
HCW3	23	F	Midwife	Midwife	4
HCW4	23	F	HEW	HEW	4
HCW5	25	F	HEW	HEW	4
HCW6	30	F	HEW	HEW	4
HCW7	23	F	HEW	HEW	5
HCW8	24	F	HEW	HES	5
HCW9	25	F	HEW	HEW	5
HCW10	26	F	Midwife	Midwife	5
HCW11	28	F	Midwife	Midwife	5
HCW12	28	F	HEW	HEW	5
HCW13	28	F	HEW	HEW	5
HCW14	25	F	Midwife	Midwife	6
HCW15	25	F	HEW	HEW	6
HCW16	26	F	HEW	HEW	6
HCW17	30	M	HO	HC Head	6
HCW18	29	F	Midwife	Midwife	7
HCW19	30	M	HO	HC head	7
HCW20	30	F	Midwife	Midwife	8
HCW21	35	F	HEW	HEW	10
HCW22	36	M	BSC Nurse	MNCH Coordinator	11
HCW23	45	M	BSC Nurse	MNCH Coordinator	20
HCW24	47	M	BSC Nurse	MNCH Coordinator	20

Table 5 3: Schematic presentation of objectives and themes

Objectives	Themes
Women's views and experiences on utilisation of PNC	Poor understanding on the importance of PNC Limited knowledge of neonatal danger signs Inadequate IEC and counselling services on PNC Experiences of women on facility based PNC Harmful traditional practices during PNC
Views and experiences of health care workers on PNC	Suboptimal provision of PNC services Limited medical equipment, supplies and drugs for PNC services Linkage and communication at levels of health systems Availability of health care workforce for PNC services Poor infrastructure for PNC
Factors facilitating the utilisation of PNC services	Availability of health information and incentives Existence of demand creation interventions Existence of supportive traditional practice
Factors hindering the utilisation of PNC services	Travel related barriers for PNC visit Early discharge following delivery Inadequate IEC activities on PNC PNC data management Inadequate knowledge and shortage of supplies Weak community structure

5.4 ANALYSIS OF DATA COLLECTED FROM THE STUDY PARTICIPANTS

5.4.1 OBJECTIVE 1: WOMEN'S VIEWS AND EXPERIENCES ON UTILISATION OF PNC SERVICES

This section discusses the themes emerged in relation to women's views and experiences on utilisation of PNC services. The themes included poor understanding on the

importance of PNC, limited knowledge on neonatal danger signs, inadequate IEC and counselling services on PNC, experiences of women on facility based PNC services, and harmful traditional practices during PNC period.

5.4.1.1 Theme 1: Poor understanding on the importance of PNC

- **PNC service is considered for sick women or newborn**

This study has revealed that PNC service was something reserved for sick women and sick newborn. Most of the health care workers mentioned that it was unlikely that the women would come back to access PNC service unless she or her newborn were sick. The interviewed women have also made the following assertion:

> "*In my professional life, I have never met a mother who has come back for postnatal care services. Either baby or mother must be sick before they will be persuaded to come here. No mother comes here unless she encounters sickness*" (hcw3).

> "*…once mothers leave the health centre, they don't come back on the third or the seventh day. They never come unless they get sick or their baby gets sick*" (hcw14).

> "*I was not sick, I was healthy (laughed, and said « o'o»); so why should I had to seek health service. Any way I did not go health institution, because I was healthy for two months after delivery*" (p6).

- **PNC visit is considered for Family Planning**

The study identified that most of the participants considered the purpose of PNC visit as getting counselled and utilise family planning services.

> "*After the 45th day, they come for family planning services*" (hcw19).

"*They come for family planning and for vaccination but they don't come for postnatal care*" (hcw3).

"*I will get counselling service related to family planning*" (hcw5).

"*No, some may need family planning services and go to the health facility*" (hcw1).

- **PNC is for EPI**

Most of the study participants mentioned that they only go the health facility for immunisation purpose on the 45th day of delivery unless they got some kinds of illness which will force them to go the facility before that.

"*Yes, I returned after 45 days for immunisation of the baby*" (p7).

"*At 45th day every women take their baby to health institution for immunisation*" (hcw2).

"*As far as I know no one visit health institution before 45th day of delivery, unless they develop any health problem. Every postnatal women revisit health institution at 45th to take their baby for immunisation*" (hcw24).

- **Perceptions about the importance of PNC service**

This study identified that the majority of the interviewed participants considered PNC service as not important and is needed only when the women and the baby get sick.

"*There is nothing wrong with me. Why do I need postnatal care?*" (p15).

"*No, it is not as such important. But if the mother and baby feel sick, they have to visit health facility*" (p7).

"…*however, there were also some women who mentioned PNC service is important for them to keep the health of the baby and themselves*" (hcw22).

"*Medical follow-up is important for a mother to be strong and for the child to be healthy*" (p3).

"*I think it is important for my health and the health of my baby*" (p2).

- **PNC visit was made for immunisation**

This study noted that there was a consensus among the interviewed women that PNC series visit was meant only to immunise the newborn not for other purposes.

"*Yes, I returned after 45 days for immunisation of the baby*" (p7).

"*No, I returned for immunisation after 40 days" (p2).*

"*I don't think a woman should visit a facility before 40 days unless otherwise she feels sick*" (p14).

- **Post-natal period is considered as a time of rest**

This study noted that PNC period is considered as a time of rest as the painful experience of giving birth has elapsed. They did not feel that something wrong may happen on the newborn and on themselves.

"*I have delivered a child. Now it is time to rest*" (p7).

"*I cannot say clearly why attention is not paid to it. Maybe it is because of a belief that nothing happens. The belief is also that once the baby is born it is a relief for the mother*" (hcw23).

"*Mothers want to go home as soon as they have given birth. They want to go home and take rest. They may not want to stay in the health facility*" (hcw10).

- **Feeling of healthy during PNC period**

This study has identified that feeling of healthy after delivery was one of the reasons for women not to visit health facilities for PNC.

"*Feeling healthy after delivery and assuming it is not important after delivery*" (p17).

"*I do not think, if I feel healthy. But, I can go to the health facility if I do not feel good*" (p9).

"*Because I was happy with my status and feeling healthy*" (p18).

"*No, there is no health problem. I am healthy, and my baby is also healthy*" (p13).

5.4.1.2 Theme 2: Limited knowledge of neonatal danger signs

- **Sign and symptoms considered worthy of visiting the health facility**

The majority of the participants in Goro woreda mentioned some of the danger signs of newborn and claimed that they have learnt this during the community meetings organised in the community.

"*If there is fever, if the baby is not able to suck breast, crying*" (p9).

"*When she has fever, vomits and diarrhoea occur I know I will take her to health centre. I have learned this during the community meetings*" (p17).

"*I might have missed some signs as I was on maternity at the time health education was provided for the community during the community meetings. But fever, vomiting, diarrhoea, difficulty to suckle /feed breastfeed are some of the symptoms for which I should take my child to the health centres*" (p12).

5.4.1.3 Theme 3: Inadequate IEC and counselling services on PNC

- **Not heard about PNC**

Most of the participant women reported that they did not have information about PNC services. Had they been informed, they would considered to visit the facilities for PNC services. Some of them have also claimed that they received information about immunisation services only that is given for the newborns.

"*I have not ever heard about postnatal maternal and neonatal danger signs*" (p5).

"I *did get no information about PNC service except that of vaccination service I have heard from my mother-in-law*" (p19).

"*In my opinion it is lack of information about the postnatal visit. For example, no one told me to be checked before 45th*" (p15).

"*Probably, had I got information before I would have received the PNC service?*" (p16).

- **Lack of awareness about PNC services**

The study participants mentioned that lack of awareness about the importance of postnatal care services is one of the contributing factors for low utilisation of the service. Some of the participants mentioned that more counselling service should be given to pregnant women during their pregnancy so that they utilise the service later.

"*The mothers in the town do not understand the importance of postnatal care and so, they don't come to health facilities for the services*" (hcw3).

"*The reason they don't come for postnatal care is lack of awareness*" (hcw20).

"*Most mothers have the awareness and delivery at health facility. But there are some who do not have the awareness as well as knowledge and delivery at home and not go to the health facility for post-delivery service*" (hcw17).

"*Postnatal care services can also be strengthened by counselling pregnant women when they come for check-up and telling them about it along with advices on how to take care of themselves during pregnancy. It is important to explain to mothers the advantage and disadvantage of postnatal care in detail*" (hcw23).

- **Women were told about caring for vaginal tear "stich"**

The study participants reported that they had received information about the care to be given for vaginal tear when they got discharged from the health facility after delivery.

"*They also told me how to be careful with the stitch*" (p8).

"*He checked the stitch and told me not to put on trousers till it healed. If I put on trousers, he said, infection would ensue*" (p14).

"*What they told me when I was discharged was that I should not soak the stitch in salt solution*" (p15).

"*When I was discharged from the hospital, I was given some drugs and I was told to be careful with the stitch. They didn't teach me anything else*" (p6).

- **Women were told only about the importance of breastfeeding and personal hygiene**

The study participants reported that they had received information about breastfeeding and the proper positioning for breastfeeding. In addition, they also claimed that they had received education about keeping personal hygiene.

> "*They told us that we should not hold the baby upside down during breastfeeding and they taught us to burp the baby after breastfeeding. But beside that, nobody taught me about danger signs of the baby and of the mother*" (p8).

> "*They told me that my child should be fed on breast milk sufficiently*" (p16).

> "*They teach about breastfeeding and personal hygiene. They also give various other lessons*" (p19).

> "*Yes, they informed me to maintain the hygiene of my baby by proper washing the baby's clothes, proper breastfeeding, attending baby's immunisation as per the schedule given/to be given*" (p11).

- **The effects of late stage ANC visit on counselling services**

The majority of the women interviewed used ANC services though did not make the full recommended visit. During ANC visits, apart from the care provided before pregnancy, the health care workers reportedly provided counselling and advise to the women to deliver in the health facilities and also advise the women about the care needed for herself and the newborn post-delivery. However, most of them started ANC visit at late stage of pregnancy and gave birth before reaching to the fourth visit. This has affected the counselling services provided to the women, which needs multiple encounters with the women, and require repetitive counselling to bring about behavioural changes towards PNC service utilisation.

"*I have gone there three times. The last time I went there she told me to come in 15 days if I didn't give birth before that. But I gave birth in the meantime*" (p10).

"*This service is important for other services which should come afterward and is an opportunity to get mothers acquainted them and to give them counselling services*" (hcw22).

"*Pregnant women should come early and we should give them a series of lessons*" (hcw3).

"*For example, if 100 mothers start ANC 1st, only about 40 will make it to ANC 4. What we have seen is that mothers come to health facility so late that their due date may arrive before they get to take ANC 4. For this reason, I did not get enough time to continuously teach the women on facility delivery and PNC services*" (hcw18).

"*It is important to explain and teach about the importance of postnatal care by counselling mothers who come for antenatal care*" (hcw11).

- **Counselling services during ANC to increase PNC service utilisation**

The study participants expressed the importance counselling services provided during ANC service for the improvement of the subsequent utilisation of maternal health services. Offering counselling service while the women are in labour or counselling service after delivery may not have a bigger impact. In addition, it is suggested that ANC services are started at earlier stage of pregnancy to get adequate time for counselling services.

"*So, it is important to give time to a mother when she comes for the pregnancy follow-up and give her information about the postnatal services. Lessons given to women while they are in labour or after they are done with labour will not do much good*" (hcw24).

"*Based on the counselling and advice they provided us, I decided to attend pre-natal care and deliver at the health center. It has many advantages for the baby and mother to be healthy*" (p8).

"*Mothers come late for antenatal services. It would be good if they came before the 16th week. But in most cases, they come after the seventh month and then they give birth in a short time. And this makes it impossible to have enough time to give counselling and education to mothers*" (hcw22).

"*Counselling is provided on focused antenatal care, facility delivery, and counselling services after delivery. When a mother comes for antenatal care, if she is not satisfied, she is less likely to come back for other services*" (hcw23).

- **Women were told to come back for immunisation only**

The study participants reported that they had received information about child immunisation and told to come back after 45th day. They were not informed about the need of visiting the health facility for postnatal check-up.

"*They told me to come back at 45th day to begin vaccination / immunisation for the baby and she also said you can take family planning / contraceptive for me if there is a need*" (p1).

"*Yes, they said come after 40 days for immunisation of your baby and yourself. They also provided medicine*" (p11).

"*Just at 45th day for immunisation and I didn't go in between as they have already appointed me to come for the immunisation (45th Day)*" (p15).

- **Women were told about family planning**

The study participants reported that they had received information about family planning and the importance of birth spacing only when they were discharged from the facility. They were not informed about the importance of postnatal check-up.

> "*They provided counselling related to family planning; they told me the importance of birth spacing. I have not been informed about postnatal care services*" (p6).

> "*They told me to use family planning so that my body would not hurt. I was not told other things*" (p16).

- **Counselling service provided to the women during PNC visit**

The study participants asserted that during the PNC visit, the women received counselling services on vaccination, nutrition, family planning, and personal hygiene.

> "*Mostly the service provided for mothers who come to health facility is counselling. Lessons are given on vaccination service, nutrition and health problems which arise in connection with pregnancy. Lessons are also given about nutrition for the mother after child birth and for the baby*" (hcw11).

> "*We give lessons for example about nutrition, family planning, problems that could occur during postnatal care, and the benefits of personal hygiene*" (hcw18).

> "*Yes, they checked-up my child and me. They provided counselling related to family planning, and they told me importance of birth spacing and care I must provide for my baby-importance of breastfeeding, hygiene and nutrition*" (p8).

5.4.1.4 Theme 4: Experiences of women on facility based PNC

- **Asked to bring appointment card**

It seemed that all women visiting the health facility for maternal health services are required to bring their appointment card and their visit card which the participants said they usually lose it. Visit card/ for the previous pregnancy may not be kept properly. The women claimed that they were refused to get maternal health services unless they come with their visit cards.

> "*It is difficult to get card as it is difficult for a mother to keep and remember a card given to her three years back, for example one pregnant mother who is my neighbour went to a health centre twice but still she couldn't get the service because she was requested to bring her previous ANC card which was given two years back*" (p1).

> "*They may say bring the card, the card might not be available or when labour comes the family members may not bring the card with us while we go to HC for delivery*" (p8).

- **Received only SBA not PNC**

The study participants who delivered in the health facilities reported that they did not receive any postnatal services rendered to them. They reported that the health care workers provided delivery services and checked them only on discharge.

> "*The nurse who assisted me in giving birth gone home and replaced by another one (working in a shift) and I did not receive any service except discharge from the health post*" (p10).

> "*They provide us nothing than assisting in giving delivery. The cloth is brought by our family; they provided us nothing, only the bed. The support I got is only delivering my baby there; no support I received from them*" (p11).

"*But at the health centre she noticed me only when I was about to leave for the hospital. I can say that she didn't notice me before that. They check you closely with something that looks like a watch*" (p16).

- **Lack of close follow-up by nurses during delivery**

The study participants reported that the women did not get much attention and services during and following delivery. Some of them were discouraged to make the subsequent visits expecting the same kinds of low level health services to be provided by the health care workers.

"*During delivery, I prefer the nurse to be close and provide continuous follow-up. But they say, "we know what time you deliver" and go away from us and I feel insecure and obsessed as I am not with my family at that time*" *(p13).*

"*Yes, they only assisted in giving birth. It is better if they advise us and provide counselling*" (p9).

"*The cloth is brought by our family; they provided us nothing, only the bed. The support I got is only delivering my baby there; no support I received from them after wards*" (p11).

- **Compassionate health care providers as a factor to receive subsequent services**

Some of the study participants mentioned that the approach of the health care workers were very good and it encouraged them to utilise subsequent services. However, some others were also mentioned they waited for longer hours and did not receive the care that they expected to receive.

"*I can say the approach of the health professionals is very good. I am happy to go there to receive service.*" (p2).

"*I got it interesting, they treated me very well. As something making me happy and satisfied is people's approach; moreover, I liked their good manner while communicating and providing me care. As I was happy with the service and service providers, I went back to the health centre for PNC*" (p3).

"*The approach of the professionals at the health centre is very good. But the service at the hospital is better. At the hospital they assign one health professional for one mother and follow her closely*" (p12).

"*Mothers complain that they wait long hours and the approach of health professionals is not so friendly*" (hcw2).

- **Complaints of the women on the approach of the health care workers**

Views on the approach of the health care workers were generally mixed. Some of the participants mentioned that some of the health care workers were not providing maternity health services in a respectful way.

"*Mothers are counselled on all kinds of services when they come to our health centre. But I don't think every healthcare professional gives all mothers the same level of advice. People are not equal*" (hcw18).

"*During the meeting with the women, some women named some health professionals personally and complained that they had been ill treated by them*" (hcw20).

- **Mismanagement of clients**

This study revealed that some of the health care workers were not providing maternity services in respectful ways. They also put mothers to stay longer time to receive PNC services. This has affected their family planning plan and also contributed to client satisfaction.

> "*I went to health centre after a year when I first seen menusus is coming. I talked to the health worker that I came here to use contraceptive and she asked me is there a menses and I said yes. However, she said no laboratory service at the moment and told me go home. And the other time, I went I said 'now I can show you with cotton swab and can't you give me the injection/contraceptive?' But she said do not nag me please go home. I stayed at home and my plan to space the birth was failed and I got pregnant*" (p4).

> "*The health workers do not give us faster service and give appointment to stay even to the afternoon but practically they do not seem quite busy. So, we always go home sadly us we always encounter this thing whenever we get pregnant*" (p5).

> "*The health care workers do not feel happy while providing us the service and I also feel sad for this; they also do not properly look in to our ANC card and properly treat us*"(p15).

- **Lack of commitment by the health care workers**

The poor PNC service utilisation was claimed to be also owing to low commitment of staff to provide the maximum possible quality of care to the clients. More than the training to be given to the health care workers, it is the motivation and care for humanity matters more in the provision of quality health services.

> "*There is a problem of professional's commitment. You cannot say that training has not been given because the healthcare professional has been training while in*

the institute. Moreover, capacity-building training programmes have been provided at various times" (hcw17).

"*The commitment of the healthcare professional is also worth mentioning here. Now-a-days there is low staff motivation. The health professional has a great role. Not because someone has ordered you but if you work for yourself and for humanity, there is nothing that cannot be improved*" (hcw19).

"*We would not say that we lack medical instruments needed for providing postnatal care services. As it is known, providing postnatal care services does not require lots of medical equipment or big supplies. The problem is lack of commitment by the health care workers*" (hcw24).

5.4.1.5 Theme 5: Harmful traditional practices during PNC period

- **Uvulectomy**

This study revealed that harmful traditional practices such as cutting *uvula* when the newborn get sick are being practiced in the community. As some of the women reported, cutting of *uvula* is done secretly and is usually done after giving some kinds of herbal medicines. There were also newborns who died owing to non-stop bleeding following the cutting of the Uvula.

"*There are many traditional practices done during postnatal period. For example, they cut the uvula. There are babies whose uvula was cut off and who died of bleeding. A baby was brought here to this health centre, but its bleeding would not stop. So, we referred the baby and it died*" (hcw5).

"*They may cut uvula secretly.*" (hcw7).

"But many people around here cut the baby's uvula when the baby gets sick" (hcw13).

"When their baby gets sick, first they make the baby drink some herb juice and if it does not recover with that treatment, then they cut off its uvula" (hcw16).

- **Application of Lemon Juice on top of the head**

This study identified that pouring lemon juice and sugary water on top of the newborns head during sickness was a common practice in the community. This pouring of lemon juice on top the head is done when the *uvula* is swollen or when a child is unable to take breast milk.

"*Dropping lemon juice on top of the head can make a swollen uvula shrink*" (p3).

"*Yes, I will pour lemon with sugar on the centre of her head*" (p13).

"*No, it is just simple outing the sugar and the lemon juice on the centre of the head of the child*" (p17).

"*When the babies refuse breastfeeding, they put lemon juice mixed with sugar on the babies' head*" (p5).

"*Dropping lemon juice on top of the head can make a swollen uvula shrink*" (p1).

Application of butter on the newborns body and the umbilical stump

This study revealed that the majority of the women did apply butter on the umbilical cord believing that it will help the umbilical stump to fall off easily. They also anointed the newborn with butter after bathing.

"*As soon as the baby is born, his head is anointed with butter. We anoint his whole body with butter. I haven't put butter on his navel. However, it is believed that if*

butter is applied to the navel, the wound from the severing of the umbilical cord will heal quickly" (p18).

"*After we came home, I have applied butter to the navel where the umbilical cord had been severed so that the skin would not be chapped*" (p11).

"However, some of the participants said that they had had health education from the health extension workers about it and they no longer applied that" (p17).

"I used to apply on the navel when the umbilical cord is severed but I no longer do after I received health education from the health extension workers" (p13).

- **Giving Sugary water to newborns**

Some of the study participants reported that there were some women who did give sugary water for the newborn. Some of the participants also said they received health education from the health care workers and they only give breast milk to the newborn.

"*But in our community, women give their baby sugar dissolved in water, even I did not do this b/c I got worried probably if the baby chocks while drinking water*" (p13).

"*They also told me not to give even water and to exclusively breastfeed the child up to six months and then to come on the 45th day to start the vaccination*" (p7).

- **The practice of bathing a newborn**

This study has identified that bathing the baby immediately after birth was a common practice in the community. For the majority of the interviewed women, there were lack of knowledge about the importance of delaying bath, especially for home deliveries where the birth attendants washed the baby immediately after birth. The babies are bathed immediately for the purpose of keeping their hygiene. Some of the women who delayed bathing for different reasons regretted for doing so.

"*I was late and I should have bathed the baby immediately but I didn't get water in the health centre*" (p6).

"*We bathed the baby when we returned home. The reason I didn't bathe the baby as soon as I got home was because there were so many of our neighbours in the house. I have no idea when and at what time a baby should bathe because nobody taught me about it" (p14).*

"*No, they did not told me about the duration, they simply told me that I have to keep the baby's hygiene by giving bath. But we bathed the bay soon after I reached at home*" (p18).

"*In our community newborn are bathed immediately after birth, unless the baby is sick*" (p13).

- **Women are not allowed to go out during PNC period**

The study discovered that there are deep-rooted belief and culture in the study area prohibiting the women to go out during PNC period. Going out of home on day time during PNC period is traditionally believed to bring some kinds of illness to the women. Even when the newborn is sick or for vaccination visit, the family will take the newborn to the health facilities.

"*They are superstitious about exposure to sunlight believing it can harm them. The mother doesn't go out and if she does, she will be sick*" (hcw24).

"*They say they have seen people who have fallen sick. Because of these beliefs it is hard to say there are mothers who come to health facilities for postnatal care*" (hcw11).

"*Because of tradition, mothers don't leave the house for two or three months. Even for vaccination, they don't bring the baby but somebody else brings the baby. According to tradition, going out is strictly forbidden*" (hcw20).

"*No, in the area, a mother is expected to stay at home for two months and even I can't go to a river to fetch water (hcw10).*"

"*They believe the piece of metal protects the baby from evil spirits. They talk of sunlight, evil spirits, people's eyes and various other deep-rooted traditional beliefs. They believe some mothers fall ill because of these" (hcw23).*

5.4.2 OBJECTIVE 2: HEALTH CARE WORKER'S VIEWS AND EXPERIENCES ON UTILISATION OF PNC SERVICES

This section describes the themes emerged concerning the views and experiences of health care workers on PNC services. The themes emerged includes suboptimal provision of PNC services, limited medical equipment and supplies, linkage and communication at different levels of the health system, availability of health care workforce and poor infrastructure for PNC.

5.4.2.1 Theme 1: Suboptimal provision of PNC

- **Perception of HCWs on the use of PNC**

This study has shown that the health care workers perceived PNC to be important to the woman and the newborn and actually gave information to the women about its importance to improve the health of herself and the women. However, there was a tendency of considering the service provider of PNC services where only Midwives and the rest of the health care workers did not give much attention to this service as the midwife did.

"*Postnatal care has great benefits. Mothers do not go to health facility unless they are sick but we try to persuade them to go. We teach them that if they don't go to a health facility, they as well as their babies might fall into serious trouble* " (hcw11).

"*First, if we consider the baby, the baby will get the required medical treatment like proper breastfeeding and hygiene. The mother will also be checked her health and get the necessary medication*" (hcw14).

However, there was a tendency of considering the provision of PNC service as the responsibility of the midwife not the other health care workers.

"*When a midwife is not around, I think it would be good if other healthcare professionals took on themselves the duties of providing postnatal care services. In the current situation, they think providing postnatal care and delivery services are the duties of the midwives*" (hcw10)

"*It would be good to give training to general health practitioners. The other healthcare professionals besides the midwives do not have good attitude*" (hcw3)

- **Perceptions of the importance of PNC by the HEWs**

This study identified that the majority of the health extension workers underestimated the importance providing PNC service either to the women or to the newborn if both of them are apparently healthy. They did not see the importance of travelling a long distance or spending money for transportation without having any kinds of sign and symptoms of diseases.

"*Health extension workers have not convinced themselves of the importance of the service and are not providing the service adequately*" (hcw1)

"*Think about it yourself; how can we ask a mother to come with her baby on the second day after giving birth? For example, how can a mother two days after giving birth come from the place that we reach paying 30 birr for motorbike ride*"(hcw7)

"*Yes, they never visit health centres unless they are sick and of course I believe that there might be nothing they can get from health institution when they are healthy*" (hcw16)

- **PNC does not get much attention**

The study finding announced that PNC service provision does not get much attention by the health authorities as well as health care workers working in the facilities. More attention has been given to increase institutional delivery and prevention of communicable diseases such as HIV. The subsequent PNC services following the discharge of the women from the facility receive less attention.

"*But we think more attention is given to delivery. Postnatal care doesn't get much attention*" (hcw19).

"*It should get as much attention as delivery had once. Information should be provided on the media about the importance of postnatal care and the disadvantages of not getting postnatal care services. A lot of education has been provided on HIV and other health services but postnatal care never got so much coverage*" (hcw17).

"*As I told you before, attention is mainly on the services provided in the first 24 hours but nobody pays much attention to the second and third visits. They pay attention mostly to the first 24 hours*" (hcw2).

- **Less attention is given for PNC performance evaluation**

The study participants expressed that PNC service is given less attention ever during performance evaluations and during performance review meetings. More attention is given for ANC and delivery performances.

> "*Even in the performance evaluation, more attention is devoted to antenatal care services (1-4) and the services offered during child birth and not much about postnatal care. It can be said that on the report and performance evaluation, little attention is given to postnatal care*" (hcw23).

> "*PNC is never raised as an urgent issue. During review meeting and reporting, attention is not paid to postnatal care*" (hcw24).

- **House to house PNC service provision**

This study has identified that health extension workers made house-to-house visits to provide counselling, advice and offer medication to sick newborn by making PNC visits. This is supported by the following excerpt:

> "*Health extension workers should handle the second and third rounds of door to door services so that this condition can be improved in the future*" (hcw2).

> "*When we go to give door to door services, we take along with us thermometer and scales as well as MUAC tape. When we go, we see their problems. If we can solve the problem on our own, we will but if not, we refer them. For example, if they bleed or have any problem beyond our capacity to handle, we refer them. We may give them paracetamol to cool down their fever*" (hcw5).

> "*As an urban HEW what we do on PNC is that we will make home-to-home visit when a mother gives birth; by going home to home we ask if there is any existing problem, weather the mother and her newborn are healthy, if there is any bleeding; if these problems are not existing we advise / educate her to elusively breastfeed*

her baby up to six months. The baby will be exposed to various diseases if she provides different kind of food before six months this is what we do during home to home visit" (hcw21).

- **2nd, 3rd, 4th PNC visits are considered home based**

The study participants felt that the 2nd, 3rd, and 4th PNC visits are supposed to be conducted at community level by the health extension workers. Some of the reasons they put for this was the distance of the health facilities from the home and the difficulty for the women to walk for long distances following delivery to receive PNC was not found to be feasible.

"*After the women delivered in the facility, we send her home considering she may get the second and third visit services from health extension workers at home level*" (hcw6).

"*After giving birth, they will not travel so long for postnatal care services. Health extension workers should handle the second and third rounds of door-to-door services so that this condition can be improved in the future*" (hcw7).

- **Incomplete PNC service provision**

The study has identified that the health extension workers go house-to-house to provide counselling and advice to the women during pregnancy and postnatal period. They also provide vaccination services during the home visit. The study identified that apart from counselling and advice provided by the health extension workers, there were no other services provided.

"*Yes, they visited me after two weeks, examined me and provided me advice*" (p2).

"*Yes, they have come at the third day and at the 45 days also they return to give vaccine for the child*" (p12).

"*But she had just been here before you came. She asked if I had had a safe delivery, asked for the name of the baby and went. She didn't do anything else for me*" (p2).

"*They might orally counsel and give advices. But it is hard for them to give medical services considering the current conditions*" (hcw23).

- **Lack of referral follow up system**

This study has identified that the health extension workers whenever they encountered with sick women and newborn, they usually refer them to the health centres. However, there is no way or a system established to know whether the women or sick newborn referred to the health facilities had actually make it or not. In addition, there was no strong feedback mechanisms and exchange of information about the status and care needed to the referred cases.

"*If we come across pregnant woman at term or late in pregnancy (using either by estimating or calculating EDD if they MP is known; we used to refer her to health facility for delivery service*" (hcw8).

"*If there is a baby who has a problem, we refer mothers to take the baby to health facility. And they bring their baby to us when it gets sick. And we refer them. However, there is no communication or feedback mechanism to know the status of the referred patients*" (hcw4).

"*When they a mother or a child that has health problems during their door-to-door visits, they refer them to the nearest health facility*" (hcw6).

- **Low PNC service utilisation is perceived by the HCWs**

This study has learnt that the majority of the interviewed women did not go to the health facility post-delivery for postnatal check-up. If they did go, they usually made it when the newborn and they are sick or they went to the health facility for immunisation after 45 days. The health care workers interviewed supported this issues low PNC service utilisations.

> "*No, I did not go to health facility post-delivery and others also did not*" (p5).

> "*Unless one feels sick and get sick, we do not have the practice of visiting a health facility post-delivery*" (p17).

> "*We can say there is no PNC services*" (hcw3).

5.4.2.2 Theme 2: Limited medical equipment, supplies and drugs for PNC service

- **Lack of medical equipment maintenance unit**

This study identified that there was no responsible person to monitor the functionality of the medical equipment as well as maintain when they get broken. This has been reported to affect the type and quality of services to be provided to sick newborns.

> "*The newborn warmer is not working. We don't know how to fix it*" (hcw10).

> "*When instruments are broken, there is nobody to fix them. For example, our BP instrument is broken. We have appealed to the government about it. Biomedical engineers from the zone have looked*" (hcw20).

- **Shortage of BP apparatus**

Data from the current study showed that shortage of BP apparatus was one of the problems affecting the provision of PNC services. The health extension workers are

supposed to borrow even from other kebeles for temporary use and also most the new BP apparatus purchased is easily breaks down.

> "*We had no BP apparatus but PLA project bought it for us. We have only one BP apparatus now. We are taking turns to use it among ourselves*" (hcw10).

> "*Regarding medical equipment, for example BP apparatus breaks down quickly. We have got only one BP apparatus and we use it for prenatal, delivery and postnatal care services. We have acute shortage*" (hcw11).

> "*The other thing is that the BP apparatus bought for us breaks down quickly. It would be good if it were purchased in large quantity and distributed*" (hcw14).

- **Shortage of thermometer**

Some of the health extension workers interviewed mentioned lack of basic medical equipment such as thermometer at the health post level which made it impossible to measure the body temperature of the women and the newborn. They mentioned that they carry notebooks and referrals papers whenever they go to visit a woman in the postnatal period.

> "*I don't have BP apparatus, stethoscope and thermometer to carry with me when I go house to house to provide PNC service. I carry only notebooks, referral papers, and registry book*" (hcw8).

- **Shortage of antibiotics**

The health extension workers are supposed to provide initial dose of antibiotics to sick newborn cases and refer them to the facility. Most of them are trained to provide initial dose of antibiotics using the IMNCI classification system. However, owing to shortage of antibiotics, these services were not provided in adequate manner.

"*I don't take antibiotics along. Amoxicillin does not reach us on time. Sometimes, gentamicin may be available*" (hcw21).

"*We have been trained to administer gentamicin and amoxicillin first dose. However, we are not doing it since we are short on supplies*" (hcw4).

- **Lack of adequate medical supplies**

The study identified that the health extension workers were in short of the basic medical supplies for the provision routine medical services at the health post level as well as at home level.

"*They have no special drugs or medical equipment. If they encounter a problem, there is nothing they can do about it excepting referring*" (hcw19).

"*I take only note books, referral papers, and registry book when I go to houses to provide PNC services*" (hcw7).

"*If I get a call while at home, I take along a plastic bag and papers. But if I am here in the health post, I take gloves and paper if I have them. Otherwise I carry nothing*" (hcw12).

- **Shortage of Vitamin K/TTC**

Most of the study participants reported shortage of essential supplies and drugs such as vitamin K and TTC. These supplies have been out of stock in the facilities since long time ago and they also heard that there were shortage of these supplies in the market.

"*However, since a long time ago we had a shortage of vitamin K. Now we have no vitamin K. This vitamin is given to the newborn right away after birth. We don't have TTC either*" (hcw3).

"*There is no vitamin K. We here it is not found on the market*" (hcw10).

"*There is not enough supply of drugs for use in postnatal care. We don't have TTC either. We had run out of vitamin K until it was brought to us recently*" (hcw11).

"*We have no vitamin K at the moment*" (hcw14).

- **Shortage of Chlorohexidine**

This study identified that the use and application of chlorohexidine on the umbilical stump was suboptimal owing its shortage, false rumours about its usage and mismanagement of drug store when store containing Chlorohexidine was kept closed for several months.

"*We were using chlorohexidine for umbilical cord. But we heard recently that it is no longer to be used. I think someone who went for training and came back said so. He said it should no longer be used but nobody paid much attention*" (hcw11).

"*The drug store has been sealed; so, we are not giving chlorohexidine. The store was sealed in September and has not been opened since then. It was sealed for auditors. But it has not been opened until now. The drugs might have expired by now. Chlorohexidine used to be given to mothers before the store was sealed*" (hcw14).

"*No, we don't have chlorohexidine*" (hcw18).

"*We used to get chlorohexidine here. We do not let them take it home. If we had enough, we would let them take it home and apply it daily. But there is not adequate supply*" (hcw20).

5.4.2.3 Theme 3: Linkage and communication at different levels of the health system

- **Health extension workers need to be closely followed**

The study participants suggested that the health extension workers need to be supported and closely followed to make sure that they provide the services they are supposed to provide.

> "*Health extension workers should be motivated to do their work very well. I think it would be good if the head of the health centre and the head of the district contacted health extension workers and talked to them*" (hcw11).

> "*Health extension work should be strengthened. If they get tired, I think we ought to go door-to-door to do the work along with them*" (hcw2).

> "*Most of the health extension workers are not in their working place. If you go and check at a random you may not get them in their working place*" (hcw17).

- **Inadequate supportive supervision to the health posts**

This study has identified that the health centres conducted supportive supervision to the health posts to improve the PNC service provided by the health extension workers. However, this supportive supervision was not conducted frequently owing to the shortage of manpower and transportation facilities from the health centres.

> "*When we go to kebele for the monthly supervision, we check the records at health posts to see how many mothers have been delivered and how many have received postnatal care. When we face problems, we discuss them with health extension workers. We deal with the problems that can be resolved and put down the way forward for others*" (hcw18).

> "*We ought to strengthen supportive supervisions to the health post*" (hcw11).

"*According to the regulation, we have to go to health post once a week. However, due to shortage of manpower, we cannot say we go there once a week. We go once a month. And when we go, we take a checklist. We have only one motorbike which we use for travelling. Therefore, we cannot move around as we want and we cannot do supervision works as much as we want*" (hcw20).

- **Poor communication between HC and HP**

This study has identified that there was poor communication between the health centres and health posts regarding delivery status. The health extension workers were not receiving any information regarding who delivered in the health centres so that they would go to the woman's house to provide PNC services. The health extension workers knew who delivered in the health centre when they went to the health centre for a meeting.

"*We find out who has delivered in our kebele during meetings. We only get rumour of those who give birth at health centre. We don't have an organised information system*" (hcw7).

"*It would also be good if telephone communication were established between the health centre and the health post. If we made it known when a mother is discharged, that would make it easy to keep track of what we are doing and what we are not doing*" (hcw20).

"*I think it would also be helpful to strengthen the communication and information exchange between us and health extension workers*" (hcw3).

"*We have not enough information about whether health extension workers are giving door to door services or not*" (hcw18).

"*When a woman who has given birth at health facility goes home, a health extension worker may not be informed of it. No information is provided about a*

woman who was delivered in our health facility, how long she stayed after child birth and what services she received" (hcw22).

- **Irregularities on PNC service report by the health extension workers**

Most of the interviewed health extension workers reported second and third visit of PNC services knowing that they actually did not visit the women in the recommended visit schedule. First PNC services are not reported from the health extension workers as it was unlikely to make the first visit within 24 hours. Some of the health extension workers did not report the second and third visit of PNC at all as they usually do not manage pay the visit in the recommended visit schedule.

"*We go to the mothers mostly on the 7th day or the 45th day. We meet them unexpectedly. To tell the truth, I have never reported postnatal care because we don't see any mother on the 3rd day or on the 7th day. That is why I don't report. I don't report doing anything*" (hcw5).

"*They report the second and third rounds of visits. They do not report the first PNC because they cannot reach the mothers within 24 hours of deliver to give the service*" (hcw20).

- **Inconsistent PNC indicator definitions**

This study has identified that the PNC report submitted to higher levels were not consistent from facilities to facilities. Some of the time they reported all skilled delivery attendance as PNC, sometimes they added the second and third visit of the health extension workers into the first visit PNC, and some of them are reporting the actual PNC service given to the women.

"*We report on the first 24 hours. And that is equal to PNC. However, sometimes PNC and SBA performances may not be equal because second and third round visit reports are submitted by health extension workers*" (hcw7).

"*Our reporting method for postnatal care is very inconsistent. Sometimes we are asked to add up all visits. Sometimes, there are some who say that a mother should be reported only once if she actually comes to receive PNC service*" (hcw2).

"*PNC and SBA performances may not be equal because second and third round visit reports are submitted by health extension workers*" (hcw19).

"*But they are not likely to come back. So, they report postnatal care of only those who gave birth in a health facility*" (hcw3).

- **Health care workers review meeting**

During the interview with the health care workers, it emerged that the health authorities in the district usually call for a meeting to review the performances of the health services and also discussed on some of the complaints raised by the community on the health delivery issues. These meetings were used to develop action plan to respond to the problems raised by the community.

The following excerpts were taken:

"*For example, we brought together all the midwives working in the district last week for discussion with the community about all the problems and how to solve them. Where are we? Where are we heading? We listened to all the community's complaints on the midwives and discussed them. Before the meeting was dismissed we agreed that midwives should respond to the complaints of the community*" (hcw2).

"*We evaluated our five-month performance last week. There are other works which we have planned as a follow-up. The main focus is to deal with what problems we face when mothers come to health facilities for delivery. And we have also decided*

on how we can solve these problems. We have considered the question of how mothers can stay in the health facility for 24 hours after giving birth to a child and before being discharged" (hcw19).

5.4.2.4 Theme 4: Availability of health care workforce for PNC services

- **Shortages of midwives**

Some of the study participants expressed their concern about the availability of midwives in the health centres to provide optimum maternity health services This was to cover shifts and provide services when some of them are absent owing to sickness or other reasons; it is very challenging to provide the required services to the women.

"*We are told not to hire over three midwives in one health station. However, they are not enough. There is antenatal care, delivery service, postnatal care, there is also night off/on. So, we need more professionals*" (hcw24).

"*There are only two midwives in this health centres. It is difficult to be present always in the facility. In case one of us is sick and absent, it is difficult to cover for the other*" (hcw22).

"*There are only two midwives. If one works the night shift, the other takes over during the day. It is very difficult to do and follow up other health care activities to be conducted by us*" (hcw23).

- **Shortage of HEWs**

The study has learnt that in some of the wider kebeles several health extension workers providing services were not adequate enough to make house-to-house visit and provide PNC services.

"*Despite the size of population in this catchment area, there are only 2 health extension workers, whereby it will be very difficult to provide care for all the women and even their postnatal period may pass before we reach all the women*" (hcw22).

"As I told you, the kebele is very wide; so, we cannot reach everyone in time" (hcw24).

- **Complaints of the upgraded health extension workers (Level 4 HEWs)**

The health extension workers mentioned that they had a good motivation and interest to provide basic health services to the community as per the training they had received. However, there are issues related with professional names they got after completion of the training and there are also different logistical challenges they are facing with.

"*Since I am level 4, I would like to do something more demanding. But I am still doing the same thing I used to do long time ago. The health extension worker has currently reached a critical point. There are lots of problems that need to be dealt with. I believe the strategy should be corrected or completely changed*" (hcw5).

"*Now has come what they call level 4 health extension. I have taken the training. However, I am still a health extension worker and nothing has changed. Therefore, it is not very pleasant*" (hcw16).

For the upgraded health extension workers to provide maternal health services as planned, there are a number of logistic-related challenges preventing the delivery of services.

"*For example, now level 4 health extension workers have been trained to give postpartum family planning. However, considering the current conditions, it is hard to say they will be able to give services. Postpartum family planning should be*

given in 48 hours. But it is highly unlikely that a health extension worker can reach a mother within 48 hours after delivery and give her the service" (hcw23).

"*For example, there may be something the mother needs. She may bleed. So, when I encounter such kinds of problem, what would I do to control it? And for many different cases we need different medical skills and instruments*" (hcw8).

"*Even level 4 trained health extension workers, when they encounter "retained placenta; they cannot handle it during home visits*" (hcw17).

5.4.2.5 Theme 5: Poor infrastructure for PNC

- **Needs of upgrading the existing health posts**

The health extension workers have suggested that that the existing health posts should be upgraded to clinics having the entire necessary infrastructure such as water and electricity and adding more health care workers in the upgraded clinic to provide more comprehensive medical services.

"*If possible, this health post should grow into a clinic and have all the necessary supplies so that it can serve well*" (hcw1).

"*There is not enough input and infrastructure to work with. For example, there is no electric power, no water supply, and no house. There are so many problems. Nobody can do anything worthwhile with such needs unfulfilled*" (hcw12).

- **Lack of a dedicated room for PNC service in some of the health facilities**

There is ANC and delivery ward. However, PNC does not have its own ward and is not provided like the other services.

"*If a department of postnatal care opens in every health station and professionals are assigned for it, it will help to increase awareness about the importance of postnatal care by teaching mothers when they come for their baby's vaccination on the 45th day after birth*" (hcw2).

"*There is shortage of rooms. There are departments or rooms for antenatal care, delivery and family planning but none for postnatal care. If there had been a department of postnatal care complete with staff and equipment and operational, it could have attracted mothers*" (hcw17).

- **Shortage of electric supply**

The shortage of electric power supply was one of the factors affecting the delivery of maternal health services especially during night time. However, some of the health centres had solar panels installed by development partners which they used for maternity ward only. This solar panel is also broken in the some of the facilities with no one to maintain it.

"*Now there is no electric power and the solar is broken also. There is no one to maintain it. When mothers stay here over night, they stay in darkness*" (hcw11).

"*Thanks to CUAMM, we have no electric power problem. We have solar panels*" (hcw14).

"*For example, there is no electric power*" (hcw18).

"*All we have in this health centre is a solar panel which we use it only for maternity ward. At this time, there is no electric power problem*" (hcw20).

- **Shortage of water**

Shortage of and lack of water supplies in the health centres were some of the challenges the health facilities faced with in giving PNC services. Some of the health facilities also mentioned that a development partner which used to provide maintenance support has stopped providing this service and this created many problems.

> "*We use water from a well. The water is not of quality. We have no tap water*" (hcw8).

> "*It was CUAMM who used to pay for fixing water pipelines when they broke. But now there is no one to help us*" (hcw3).

> "*There is not enough input and infrastructure to work with. For example, there is no water supply, and no house*" (hcw10).

- **No washing facility in the health facilities**

They study participants reported the absence of washing facilities at the health centres for them to take shower and keep their personal hygiene following delivery of a baby.

> "*Because of less attention from care providers and absence of washing facility, I went back my home even without changing my clothes*" (p8).

> "*From this experience I wanted to take bath during my recent delivery at the health centre. However, there was no washing facility and I went home without taking bath for myself and my baby*" (p9).

5.4.3 OBJECTIVE 3: FACTORS FACILITATING THE UTILISATION OF PNC SERVICES

Under this section themes related with factors facilitating the utilisation of PNC services are discussed. The themes include availability of health information and incentives, existence of demand creation activities and existence of supportive traditional practices.

5.4.3.1 Theme 1: Availability of health information and incentives

- **Post-delivery danger signs mentioned on EPI card**

This study found out that the new EPI card contains information about the postnatal danger sign which requires immediate medical attention. However, the EPI card containing this message are given to the women when she come back for immunisation after six weeks and was also not written in local language.

> "*The baby also may refuse breastfeeding and have fever. I knew about these things because I saw them written on the vaccination card. It says on the paper that when we see these symptoms, we should go immediately to a health facility and that is how I knew about them*" (p9).

> "*There is no reading material to give them so that they will read when they are discharged. However, there is the vaccination card which we give them when they come for vaccination. Danger signs are listed on that card. But we give that card when mothers come for vaccination; that card is not given when the mother is discharged*" (hcw3).

> "*The paper which we use for lessons now contains what are mentioned on the vaccination card. And this is given only when they come for vaccination. And it is written in Amharic*" (hcw10).

> "*Nobody has given us orientation on how to use vaccination card. The card is given only when they come for vaccination*" (hcw10).

- **Provision of baby kits as incentives**

The health care workers that provide baby kits including baby cloth towel and cleaning soaps, which was introduced by one of the development partner working in the area, has contributed towards increment of utilisation of delivery and PNC services.

> "*Not just to those who have problems but the project gives BT kit and mosquito net to mothers who have just been delivered of a child. They call us for these items. Even when they are delivered in hospital, they don't get these items. So, they call us for these items and we find out that they have given birth*" (hcw2).

> "*Women are interested to come to the health facilities to deliver and receive PNC care services and also receive the baby kits which is provided for women delivered in the facility*" (hcw3).

> "*Mothers are more motivated by promises of what they get and what will be given to them. They are not easily attracted by a promise of getting education. It is very hard to explain to them that education is more important than free materials. Therefore, if the education programme is presented in connection with income generating activities, I believe that it will attract mothers*" (hcw18).

5.4.3.2 Theme 2: Existence of demand creation interventions

- **House to house health education by the HEWs**

This study identified that health extension workers, with all the challenges of making home to home visits, provided health education to the women on ANC, delivery and PNC services. However, the health education given to the pregnant women at household level was not organised or prepared ahead of time. It was just provided whenever a pregnant woman was there in the house visited. The topics covered during home visits included informing about the importance of institutional delivery, care to be given to the newborn, care for the umbilical stump, danger sign of pregnancy and post-delivery complications. The following excerpts testified this.

"*We give them health information about institutional delivery with all its advantages for both the mother and her baby; the negative impact of having delivery at home and that they always should prefer institutional delivery to home delivery" (hcw7).*

"*Yes, we do provide them health information. First, we ask them if they encounter any problem since delivery (including head ache, bleeding..), we ask about the baby (how well the baby feeds to breast milk, the condition of the cord..) and finally we demonstrate her how to properly breast feed to her baby and tell her to visit health institution if there is any maternal or neonatal danger signs*" (hcw21).

"*We also teach them that they should not apply any traditional medication on the umbilical cord. We tell them that the umbilical cord will heal on its own and they should leave it alone*" (hcw12).

However, this claims of the health extension workers on making regular home visits was dismissed by the majority of the women interviewed stating they have never received home visit by the health extension workers during their pregnancy period. The following statements confirm this refutation:

"*Never, no one come to my home to provide health service*" (p4).

"*No, she did not come to my home*" (p10).

"*Nobody has taught me along this line. I have never met health extension workers during my pregnancy*" (p17).

- **Existence of participatory learning and action (PLA) facilitators**

The PLA facilitators which is initiated by one development partners in the study has reportedly contributed immensely towards creating awareness of the community on

MNCH services. This PLA facilitators are used as a bridge connecting the health extension workers with the community members in passing health information and also encouraging women to utilise MNCH services available in the health facilities.

> "*Currently, the PLA project is active but there is significant government structure. The PLA has trained facilitators very well and deployed them and their performance is very good. These facilitators also have good relationship with health extension workers. They are doing their works closely and in cooperation*" (hcw17).

> "*There are also facilitators recruited by the PLA project and who work with us. Awareness raising works are being done widely by them too. Now people have awareness of what kind of problems might arise during pregnancy*" (hcw24).

- **Health extension workers utilising community gathering**

This study identified that health extension workers utilised the existing social community gathering such as coffee ceremonies and saving groups to disseminate health information to the community and advice the women to utilise MNCH services in the areas. The following excerpt supports the finding:

> "*We disseminate MNCH key messages during coffee ceremonies and other social gatherings. We will make sure that the message is heard wherever people meet. We are working on passing the message through the social interactions in the community. It is important to work on women's groups and saving associations*" (hcw15).

- **Participatory learning and action meetings**

The study indicated that the participatory learning and action meetings which was being conducted in one of the study districts has improved the community awareness on MNCH

services and increased the health seeking behaviour for sick newborns. It was considered a very good approach to reach many people. In addition, it has boosted the ability of the participants to express themselves and came up with possible solutions for the problems they encounter.

> "*There is a PLA programme in our district for the purpose of mobilising the community raising their awareness. As a result, the awareness of mothers is increasing day after day. They don't keep a sick baby at home*" (hcw6).

> "*The discussions and other works done by the PLA project have specially brought about significant change. We hope that a great change will come about when they sort out problems through the PLA project and decide on the way forward*" (hcw13).

- **Pregnant women's conference**

This study found that a pregnant women conference was held at Kebele level on a monthly basis which was supervised and supported by the health care workers and health extension workers working in the health centres. These pregnant women conferences were used by the women to share experiences and encourage one another to utilise the available health care services in the area.

> "*We go to kebele once a month for conference. We go every month to hold pregnant women's conference*" (hcw9).

> "*Health extension workers hold conferences at every kebele. Health centre also participates in this conference of pregnant women. When health extension workers go door to door, they tell the women when the conference is scheduled to be held. Various lessons are given during the conference. The lesson is given according to schedule. The participation of the community is good but sometimes only mothers participate*" (hcw20).

"*Conferences are held for pregnant women. We teach them various lessons. We use every opportunity to teach about antenatal care, delivery and postnatal care services*" (hcw11).

- **Awareness raising events as a driving force to follow up PNC services**

The study identified that increasing the awareness of the community through conduction of meetings and community mobilisation activities and provision of trainings is one of the driving forces for utilisation of PNC services.

"*In previous time we did not know much, we did not attend meetings due to lack of knowledge but now they are advising us well and telling what we should do, and we decide to follow-up*" (p18).

"*I need additional training and awareness from health professionals to receive post-delivery service*" (p14).

"*There is a PLA programme in our district for the purpose of mobilising the community raising their awareness. As a result, the awareness of mothers is increasing day-after-day. They don't keep a sick baby at home.*" (hcw21).

- **Health care workers provide information**

This study has identified that the women who delivered in the health facilities received information about child immunisation services and advised by the health care worker to comeback for the services in the 45 days of delivery.

"*They ordered us from the health centre to come back in the 45th day of delivery*" (p1).

"*They told me to take care of the child and myself, to return if I feel sick and bring the baby for immunisation*" (p3).

"*Yes, they said come after 40 days for immunisation of your baby and yourself. They also provided medicine*" (p2).

"*Every postnatal women revisit health institution at 45th to take their baby for immunisation*" (hcw24).

- **Heard about feeding practices from neighbours**

This study showed that the participant women had learned about breastfeeding practices from other women who breast fed.

"*As I heard from other lactating women, I came to decide not to give any food or fluid other than breast milk. Therefore, I did not give my child anything other than breast milk and a drug prescribed by health professionals last time when she caught cold*" (p12).

"*I heard from my neighbours I will continue for six months*" (p16).

5.4.3.3 Theme 3: Existence of supportive traditional practices

- **Visiting a woman during postnatal period**

The participants reported a very interesting traditional practice being conducted in the community through visiting a woman during her postnatal period. During the visit, porridge is prepared for the visitors, people eat together and they sing and play. Women who did not visit other women during the postnatal period will reciprocally not receive visit from that women in return. Fearing this visiting a woman during her postnatal period is a common traditional practice in the area. This is considered very important tradition and makes the women forget all the labour pain she has passed through.

"*After eating the porridge, if the baby is a boy, the guests will ululate five times and if the baby is a girl four times. Porridge is made on the fifth day. On that day, family and friends gather together and we eat the porridge. It is a very beautiful tradition. It will make you forget your pain. Some people also sing during this occasion*" (p19).

"*It is good if she received social support. It may not have some serious problem, but when she became alone she may think about many things and my get in stress*" (p15).

"*I didn't get alone after coming home and there is a big difference between a women who have somebody with her and who are alone; the one who is alone and haven't visited delivering mothers before will stay alone and get starved; but those who have visited and served delivered mothers will get his return and proudly get served*" (p8).

- **Received support from family members**

The study participants mentioned that the family members and neighbours were supportive during postnatal period helping them in preparation of food, caring for themselves and the newborn.

"*Some of the family cares include providing me different type of diets (foods) frequently, supporting me in bathing and dressing the baby, massaging abdomen, applying local belt to support my back and abdomen*" (p6).

"Therefore, my neighbours do it for me. They also visit me and undergo social events like coffee ceremony at my home. In our culture, having coffee ceremony at parturient home is one of the valuable events during postnatal period" (p14).

However, there were also participants who did not get support after delivery as their family members were not extended.

> "*There was nothing special care I did get as a parturient, because my husband has no mother, no sisters who can support me and also economically we are not capable to meet need of a postnatal woman*" (p19).

- **Supports from their husband**

Though the majority of the study participants kept silent when they were asked about their husband's support during post-partum period, some of them mentioned that husband arranged transport for them to be taken to the health facilities for delivery and accompanied them during labour.

> "*My husband, his brother and my neighbours have been with me during delivery*" (p16).

> "*My spouse, he said you will not deliver at home and brought Bajaj to take me to the health centre, his mother and neighbours also supported me*" (p10).

> "*Yes, it is my husband who will support me, Ihimm…who else will support me other than him*" (p11).

- **Received support from their mothers/ mother in law**

The study participants acknowledged that they received support from their mothers or mother in law during delivery and post delivery period in terms of taking care of children when the woman went to the health facility for delivery, accompanying women to the facility and preparation of food post-delivery.

> "*My mom and mother in law were at home taking care for my children*" (P15).

"*My mother is helping me a lot. She cooks for us and washes my clothes. She is doing everything in her power to make me comfortable. She was the one who went with me when I went to the hospital*" (P16).

"*My mother-in-law looks after my baby when I receive was in the health centre for delivery*" (P6).

"*My mother in law prepared and served me and I took to the extent my appetite allowed me to take*" (P7).

- **Abdominal massage and support**

The study participants indicated that abdominal massage was done for them post-delivery by the family members. They also applied local belt to support the back and the abdomen following delivery.

"*Yes, the family members massaged my abdomen post-delivery and applied a local belt to support my abdomen and back*" (p4).

"*Some of the family members massaged my abdomen, applied local belt to support my back and abdomen*" (p10).

- **Contribution of flour by the community**

The study participants indicated that the community members contribute a kilo of flour and one birr on annual basis that is collected by the health extension workers and kept in the health centres for making porridge and coffee to the women after delivery. This is one of the traditional practices in Ethiopia accompanying delivery.

"*The community contributes the coffee and flour. The contributions are collected annually. Mothers are the ones who make the most contribution*" (hcw18).

"*In a meeting we held last time, we urged collection of flour from contributors in the community. Each family contributes one kilo of flour and one birr. There are some who contribute two birr. Those who live in the city do not contribute flour but they give money*" (hcw14).

"*So, to sum up, coffee also is made for them. And porridge is made for them too. There is enough flour. If we look at the contribution of flour and money, it is going on very well*" (hcw11).

- **Making coffee and porridge in the health facilities**

The study participants claimed that porridge and coffee were being prepared for the women who delivered at the health centre level for the purpose of making them feel at home and thereby increase institutional delivery services. Some of the health facilities have also hired a person for the purpose making porridge and coffee to be served for the delivered women and her family members.

"*In every health facility, when they are about to give birth we let their families make coffee for them and cook porridge. All this is to make mothers feel as though they were in their own home*" (hcw18).

"*Sometimes, if the woman who makes coffee is not around, then the healthcare professionals themselves make the coffee. They also make the porridge. They entertain the family very well and see them off with good feelings*" (hcw20).

"*People who make coffee and porridge have been hired in all the four health stations. The employment has been taken care of through healthcare financing on a contractual basis*" (hcw10).

- **Practice of breastfeeding**

This study has learnt that the majority of the women interviewed had good practices of breastfeeding. The health care workers were also reported to show the proper positioning of breastfeeding.

> *"They have told me that if I give him one breast now and the other breast later, the baby will get only the water. So, I give him one breast till the milk in it is exhausted" (p8).*

> *"Yes, they told me to feed only one breast until it gets empty because the upper portion of the breast milk is water and the nutrients are at the bottom" (p15).*

> *"No, I did not express and discard, the health professionals by themselves brought my baby unto me, showed me how to breastfeed and encouraged me to breast feed the baby" (p18).*

5.4.4 OBJECTIVE 4: FACTORS HINDERING THE UTILISATION OF PNC SERVICES

5.4.4.1 Theme 1: Travel related barriers for making PNC visits

- **Distance of the health facilities**

The study participants mentioned that distance of the health centres from their home is one of the factors hindering them from visiting the health centres for PNC Services.

> *"Yes, I am willing to attend postnatal care services, we do not dislike the service our problem is distance of the health centre and lack of transportation*" (p4).

> "*It is long and difficult for a mother to travel this long distance before birth and post-delivery to health post to get the service*" (p17).

However, some of the participants also mentioned that distance would not be the barrier to reach to the health posts, which are usually available near to their village.

"*So, I don't think transport problem or distance can keep them from coming to the health post. It is near to their village*" (p7).

"No, there is no barrier; the health post is near for us" (p18).

- **Farness of residential location of the HEWs from the health post**

This study identified that the majority of health extension workers live very far away from the health post. Most of them live in towns not in the kebele where they were assigned for the work. They are supposed to walk every morning to the health post and go back to their house in the afternoon. They usually get to the health post late and leave early. Some of the times, they also rent motorbikes to reach to the health post. This has affected the provision of postnatal care services to be given at household level very challenging.

"*The place where I live is far from the health post. I go every morning by motorbike. I come from home to the health centre by motorbike and from this health centre to a health post I take a two-hour long walk. It is a very tiresome and boring trip*" (hcw8).

"*I used to live in the health post before. However, now that I am married and have children and live in town, it is not easy for me to stay in the health post*" (hcw15).

- **Urgency of labour as a reason for home delivery**

One of the reasons why women gave birth at home and did not get the PNC services which they would get in the health facility following delivery was owing to the sudden onset of labour in later hours which forced them to give birth at home.

"*Nowadays, based on their advice everyone is delivering at health centre. Sometimes we may deliver at home due to sudden labour" (p6).*

"*As the labour had commenced in the mid of night and it took only three hours since the establishment of labour delivery of the baby; I could not go to the health centre*" (p4).

"*I tried to call them immediately after feeling labour, but suddenly I delivered at home.*" (p17).

"*It was late hour. I was preparing myself to go to the health centre but suddenly I gave birth at home*" (p5).

- **Ambulance transportation services**

The study participants gave a mix of responses for the use of ambulance services. Some of them said they did call to the ambulance number and received transportation service to go the health facilities for delivery. However, some of them said they did not have the ambulance phone number and could not dial to them. Some others also said they called but learned that the ambulance was not available at the time of the call.

"*My kebele is Leman Abu the labour started me at home. Unfortunately, I didn't take telephone number to call Ambulance and it was also not indicated on my card thus*" (p1).

"*When I was in labour, however I was think about getting transportation, I had no information about whom to call. I did not have phone number of those providing ambulance services*" (p4).

"*I went to the health facility after feeling labour and used Gari transport as there was no ambulance; we asked them for ambulance and they said "there's no ambulance*" (p6).

"*I called to ambulance of Lukas Hospital and Goro health post. However, Lukas Hospital ambulance was in Addis Ababa and health post not responding*" (p19).

- **Used Ambulance services**

Some of the study participants received ambulance services to go to the health centres for delivery services.

"*Yes, I have their number and called them*" (p7).

"*I did not stay longer as I went there immediately after feeling labour, I delivered after half an hour of my arrival and I used ambulance to go there*" (p18).

"*I used Goro district ambulance*" (p9).

- **Lack of transportation facilities**

The participant women said that lack of transportation services and ambulance services to take them to the health facilities were among the factors hindering them from utilising PNC services.

"*The other reason is that some villages are so far away and there is no transportation service, mothers will not come to health post for postnatal care service unless they get sick*" (p10).

"*It is due to shortage of transport, no service of ambulance, the road is not suitable for vehicle transport and no transportation service to visit the health facility. It is long and difficult for a mother to travel this long distance before birth and post-delivery to health post to get the service*" (p11).

"*Yes, I am willing to attend postnatal care services; we do not dislike the service, but our problem is distance of the health facility and lack of transportation*" (p19).

However, some of the participants claimed that transportation services were available in their kebele which is situated along the main road where transportation services were available.

> "*There is no other problem except ignorance of its benefits. The health facilities are close to my place. Transport is also available*" (p7).

> "*There is no transport problem in our kebele. Only one village is very far away. Since most of the houses are on the side of the main road, there is no transport problem. So, I don't think transport problem or distance can keep them from coming to the health post*" (p18).

- **Shortage of transportation services**

The health extension workers who should travel to each of the households to provide PNC services are expected to walk long distances in the district to reach to the houses of the woman to provide PNC services for the women and the newborn. This is found to be challenging to make repeated visits to the house. As the community settled in a much dispersed areas, the health extension workers are getting the task of provision of home based PNC very challenging.

> "*The support we need now is transport service. We need transport services. It would be good, if possible, to arrange transport service to the far of villages*" (hcw5).

> "*…it would have been good if there had been transportation for going door-to-door. Reaching some villages takes over an hour. And I spend over 45 minutes going to the health station*" (hcw13).

- **High cost of motorbikes transportation services**

This study identified that there are private motorbikes which provide transportation services in the study area for which the user makes a call to a rider whenever they need services. However, this private motorbike transportation services are found to be very expensive for the health care workers and they are also supposed to pay out of their own pocket. The health extension workers use such motorbikes transportation services to come to the health post from their house and also to visit the households whenever they receive emergency calls.

> "*Every morning I pay 30 to 40 birr for motorbike. Payment for motorbike is taking away all of my salary*" (hcw6).

> "*It is very difficult to plan and reach out to every household. If we want to go to the furthest house from here, we have to pay 30 birr for motorbike. We pay it rather than see a mother suffer. We lose some money so that we can go serve the needs of a mother*" (hcw15).

> "*I live in the town. I pay 100 birr for motorbike every day. We are spending all our salary on motorbike*" (hcw13).

- **Poor road conditions**

Bad terrain and poor road conditions were reported as some of the challenges related to transportation services to provide house-to-house postnatal care services. Even if the health extension workers rent motorbikes, some of the areas were reported to be very difficult to ride on.

> "*…but the road is not good for transport. For example, if we want to go to a place far from here, the road is very difficult*" (hcw4).

- **Difficulties of moving in the village during rainy season**

The interviewed health extension workers and health care workers mentioned the difficulties of provision of house-to-house PNC services, especially during rainy seasons where the rivers are flooded and the fields are muddy, which makes walking for long distances to reach to the women very challenging. It is less likely that a woman who gave birth during rainy season gets home-based PNC services.

> *"It is very challenging to go door-to-door during the rainy season; the rivers overflowing their banks and the mire make movement from one place to another very difficult*" (hcw9).

> "*The road is very difficult and especially during the rainy season the mud makes walking so difficult that we cannot do it with our shoes on*" (hcw6).

5.4.4.2 Theme 2: Early discharge following delivery

- **Family members need early discharge**

This study has identified that one of the reasons for early discharge was actually owing to demand of the family members and the husbands who accompany the women during the delivery in the health facility. Once the women are delivered, the family members insist that they should take the women to home immediately.

> "*The mothers who give birth here want to go home quickly. Even if she wants to stay here, the people who come with her, especially the family, want to take her home quickly*" (hcw11).

> "*They insist on taking the woman back home right after delivery even while she is still dripping blood. This shows that there is a serious lack of awareness*" (hcw3).

> "*However, it can hardly be said all mothers stay for 24 hours before being discharged. Sometimes, because of the unwillingness of members of family, the*

mother may be discharged before staying 24 hours. They leave of their own accord; not because anybody forces them to go" (hcw11).

"*There was a time when the husband himself pleaded with me to discharge his wife as soon as possible so he could take her home before sunrise*" (hcw3).

- **Seek early discharge to take of children at home**

The study identified that some of the reasons mentioned by the participants for them to get discharged early once they delivered was that to look after the rest of the children in the house and do their daily chores at home.

"*The reason a mother wants to go home after delivery might be that she has left another child at home. Therefore, all her thoughts are about home. She wants to home and take care of her children*" (hcw17).

"*I don't want to stay in the health facility longer after delivery to take of my children who are left at home*" (p3).

- **Unclean facility environment as a reason for early discharge**

Most of the interviewed women expressed their dissatisfaction about the cleanness of the health centres whenever they go there for delivery services. The hospital found in the town was said to be cleaner than the health centres. Washing health centres' blankets and bed sheets manually was also said to be very challenging to do.

"*Washing blankets is hard for the washers; so, it is not easy to keep hygiene. The cleaners are tired of washing sheets and blankets. Therefore, it is hard to keep hygiene*" (hcw22).

"*Some of the problems that mothers raise are the beds on which the sleep after child birth, the sheets and blankets are very dirty and therefore, mothers want to be discharged very quickly*"(hcw24).

"*I know the service at Lukas Hospital, compared to that, the health centre lacks cleanliness, and for example, the cloth they put-on mothers after delivery is not clean. They do not wash the clothes. We go to health post to get cure of diseases*" (p12).

"*Yes, the wall of the health centre is full of dust and spider net, there are insects [mosquito] and beds are also not clean. These need improvement. I don't want to stay longer there*" (p2).

- **Shortage of beds as a reason for early discharge**

This study identified that early discharge from health facility was a common phenomenon in most of the health centres. One of the reasons given for early discharge was shortage of beds and shortage of rooms to accommodate more women. However, some of the health facilities mentioned that they did not have a shortage of beds as the facility delivery utilisation was very low and they did keep women for about 24 hours in the health facility closely following up her and the newborn.

"*According to the law, a mother has to stay 24 hours in the health facility after giving birth. But the problem with us is that we cannot keep a mother for 24 hours because we have shortage of beds and rooms. In most cases, a healthcare professional watches a mother for about six hours and if she has no complications, they will discharge her. But according to the law, she has to stay for 24 hours after delivery*" (hcw10).

"*Our room is very small. We have one bed for postnatal care. We have only one bed for delivery. It would have been good if the rooms were bigger so that we could accommodate many mothers*" (hcw14).

"*When they give birth here, we keep them here for 24 hours. We come across mothers who refuse to stay and insist on going. However, we do not let them go. We have no shortage of beds. We have two beds for postnatal care. We use mothers' recovery room as a postnatal care room*" (hcw11).

5.4.4.3 Theme 3: Inadequate IEC activities on PNC

- **Low media coverage about PNC services**

The majority of the interviewed health care workers and women expressed that mass media coverage about PNC services were almost non-existent. The main focus of the government is claimed to be increase of skilled birth attendance rate. The women mentioned that they have never been exposed to mass media advising women to visit health facilities for PNC service utilisation.

"*Information should be provided on the media about the importance of postnatal care and the disadvantages of not getting postnatal care services. A lot of education has been provided on HIV and other health services but postnatal care never got so much coverage*" (hcw24).

"*I have never heard about PNC from the media*" (p19).

- **Inadequate morning health education session at facility level**

Some of the interviewed health care workers working in the health centres pointed out that the health promotion activities provided in the health facilities were only distribution of leaflets and posting posters submitted from FMOH or the health bureau. The morning health education sessions given to clients and patients attending the facility every

morning have been discontinued several years ago owing to unknown reasons. The lack of this morning health education was mentioned as one of the reasons for poor utilisation of PNC services.

> "*Every morning lessons are given at this health centre about postnatal care, antenatal care and about related issues*" (hcw14).

> "*Previously, health facilities used to give health education including lessons on postnatal care every morning on their own premises. However, that is not being done anymore and it has created a gap*" (hcw19).

- **Lack of PNC checklist for the health extension workers**

The study participants reported that they did not have a post-natal checklist which they may use as a reminder for the kinds of services the women and the newborn should receive during postnatal period. The health extension workers go house to house without having checklist and rely on their memory for the kinds of services they should provide.

> "*It would be good if a checklist were prepared for postnatal care and if we used it; because if we use the checklist, we will give every service that should be given without missing any. But now without the checklist, we are relying on memory to give every service and we are highly likely to forget some of the services. I say it would be good to use the checklist*" (hcw1).

> "*We have no checklist. If there was a checklist which we could take along when going to give postnatal care service, it would greatly help in the provision of the service*" (hcw6).

- **Lack of awareness raising materials**

This study has identified that there are no specific IEC materials prepared for the sake of PNC services. The health care workers rely on their memory to inform women about PNC services and the care needed for the women and the newborn during PNC period.

> "*We have no IEC materials specifically prepared for PNC purpose. It is good if we have them so that we take them along. When we go to give postnatal care service, it would greatly help in the provision of the service*" (hcw16).

> "*There is no reading material to give them so that they will read when they are discharged*" (hcw3).

- **Lack of information about the availability of checklist by the health care workers**

This study has learned that the PNC checklist which is integrated with the antenatal, labour, delivery, newborn and postnatal card was not known by many of the health care workers interviewed. The majority of the participants were demanding the checklist not knowing it was already available in the integrated card.

> "*There is a checklist for postnatal care on a card. The card is integrated with delivery card and with Partograph card. But there are not many professionals who use that card. People consider it as something else. This card is used here in this health centre*" (hcw20).

> "*The other healthcare professionals besides the midwives do not have good attitude. I think if a postnatal care checklist was prepared, it would help all healthcare professionals to check which services were provided and which services were not provided*" (hcw14).

5.4.4.4 Theme 4: PNC data management

- **Difficulty to calculate expected date of deliveries**

This study has identified that for the majority of the women it was very difficult to know their last date of menstruation which makes it impossible for the health extension workers to calculate the expected date of delivery thereby plan the postnatal care services to be provided for the women and the newborn. Sometimes the health extension workers tried to help the women to remember the last date of menstruation by mentioning significant public holidays. However, most of the time this way of estimating the date of delivery is not effective. This lack of information made it difficult to reach to the women on the post-natal period and provide postnatal care services.

> "*Most mothers may not know the last day that had their period. Those who remember the day may give birth many days after their due date. So, it is difficult to predict with precision the day a mother will give birth. So far I have not met a woman who has given birth on the day she was expected to*" (hcw1).

> "*Because they don't know their EDD, they may give birth before or after before their estimated due date*" (hcw21).

> "*We have tried to register all pregnant women. However, it is hard to predict their due date because most mothers do not remember the date of their last period. Those women who use family planning but are not consistent with it have no clue that they are pregnant till it becomes obvious on their tummy*" (hcw12).

- **Rely on information obtained during meetings to know about pregnancy status**

The study identified that health extension workers got information about the delivery status of the women from neighbours, facilitators or during meetings. There is no organised way of data collection and communication system to know who delivered when. This has posed challenges for the health extension workers to provide PNC services in the recommended PNC schedule.

"*Our means of finding out whether or not mothers have given birth or not the weekly meeting we hold with facilitators. When we meet them, we ask who has given birth. Sometimes, we find out that they have given birth when they come back for vaccination. Otherwise, it is very difficult for us to follow every mother during childbirth and give her the services*" (hcw12).

"*It is from other people that we hear of a woman who has given birth. We hear from neighbours or during meetings. If they are women we have newly met, we ask neighbours whether they have given birth or not*" (hcw15).

- **Lack of computerised pregnancy registration system**

The study participants said that the health extension workers in close collaboration with the kebele leaders and the PLA facilitators register all pregnant women in the Kebele by doing door-to-door visits and this exercise is considered very important to provide subsequent maternal health services and identify pregnancy related complications at earlier stages. However, this way of collecting and analysing data were done manually, which makes it very difficult to monitor and follow all pregnant women in the kebele. The participants expressed the following statements:

"*When health extension workers go door to door at kebele level, they register mothers who are in the kebele. After registering, if the mother knows her EDD, they write it and keep it. There are records in every kebele which hold records for every month. This is a very tedious work and difficult to follow all pregnant women*" (hcw3).

"*We give postnatal care services door-to-door; mothers do not come to health facilities. In general, mothers are not registered and we are not giving the service on time and properly. We don't have a computerised data collection, analysis and organisation system* " (hcw8).

5.4.4.5 Theme 5: Inadequate knowledge on PNC

- **Lack of knowledge and skills in treating sick newborn**

This study has identified that the health extension workers working in the rural area were providing treatment services to sick newborn. The service was being provided by classifying the disease condition of the newborn using ICCM manual. However, this service was not provided by all of the health extension workers. It seemed that there were lack of knowledge and skills to accurately classify the disease condition, identify the care needed to the sick newborn and provision of appropriate medication.

The study has also identified that the urban health extension workers were not allowed to provide such kinds of services. They were only referring sick newborn to the nearby health facilities. The following excerpts supported this assertion:

> "*When we go to their house, we examine the baby's health using the ICCM manual. If it is sick, we treat it. We give it amoxicillin. It would be good if we were trained on classification. The kind of treatment we give depends on the health condition of the baby. There are some whom we treat for five days. There are some whom we give first dose and then refer them*" (hcw15).

> "*It is very hard and not feasible. Maybe I can give verbal counselling service but doing more than that, like giving medical services, is not so easy in practical terms. It is very difficult to carry out procedures*" (hcw4).

> "*There are programmes called ICCM, CB, and NC. But I don't use them because the classification is difficult for children under two. When I come across children below two, I refer them. It is hard to classify children below two and to know their problem*" (hcw13).

"*We don't give any door-to-door medical service. We are not allowed to provide that kind of service*" (hcw9).

- **Needs of training on PNC by the health care workers**

The participants noted that considering the low PNC service utilisation in the facilities, some of them were suggesting to receive more training and orientation on it. However, some of the participants claimed that training was not needed on PNC and they have been already trained while they were in the undergraduate training institutions and also received PNC trainings with other maternal health service trainings. Health extension workers have already been trained and did refresher courses on PNC as it is already included in the health extension integrated refresher training.

"*It would be good to give training to general health practitioners. The other healthcare professionals besides the midwives do not have good attitude*" (hcw19).

"*Training has been provided to professionals. I cannot say there is a serious gap in that area. There is no professional who has not taken training. Many training sessions have been organised in the area of maternal and child health. But we are short of professionals who practice what they have been taught*" (hcw22).

"*Even if healthcare professionals have the knowledge, we have not done much about it. In most cases, training programmes have not been organised around postnatal care. What they know about postnatal care is what they have learnt at school and they know nothing more than that*" (hcw24).

"*The IRT training provided for health extension workers, postnatal care is included as one component. Other services do not have their own manuals either*" (hcw2).

- **Effects of sending health extension workers for further education on PNC service delivery**

The study has identified that the health extension workers who had left the health post for further education has affected the delivery of community based maternal health services. Some of the interviewed women also said they were getting maternal health services from the health extension workers before they left to further their education.

> "*Health extension workers left for education*" (hcw19).

> "*The health extension worker who knew that I was pregnant had left for education while the new one did not know that I had given birth*" (p14).

> "*The former health extension worker, who encourages me for ANC service, had already left for education before I gave birth and another new HEW who does not know me was assigned. Therefore, in my opinion, it may be because of this reason that the health extension workers failed to provide me PNC care at home or encourage me to go health institution*" (hcw5).

5.4.4.6 Theme 6: Weak community structure

- **Weak health development army structure**

The participants expressed their concern about the recent weakening of the health development army structure in the community which was designed by the government to facilitate passage of key health messages in the community, help the community practice key health messages and collect health information from the community pertaining to health. The following excerpts supported the findings:

> "*The 1 for 5 grouping of health development army in the community is very helpful for the work of healthcare services provision. However, this structure is currently being misused for various purposes including political ends. This kind of structure is perceived by people as political structure...*" (hcw22).

"*The "Ghere and Toko Shene" structure within the government is not going as planned. It was going on well at first but now it is not accomplishing as much as the government desires*" (hcw23).

- **Unsustainable NGO supported pregnant women conferences**

This study has learned that in most of the kebele the pregnant women conference was not being conducted as it is used to be. One of the reasons given for this was owing to discontinuation of a close follow-up and logistic support which used to be provided by a development partner working in the area. This is supported by the following excerpts:

"*We used to hold mother's and pregnant women's conferences when a development partner was here. But now we are not holding the conferences anymore*" (hcw16).

"*One organisation used to help us organise the conferences. But now the organisation is not supporting us any longer. Therefore, we cannot conference*" (hcw8).

"*When the development partner was here, coffee and tea were made available for participants of the conference but that is not possible anymore*" (hcw4).

5.5 CONCLUSION

This chapter presented the findings of the study in which the eight themes emerged. These include community mobilisation and awareness raising interventions, perception of women about PNC services, the linkage between HCs and HPs for provision of PNC services, reasons of women for not utilising PNC services, services provided to the women during PNC services, traditional practices during PNC period, challenges of provision of community based PNC services and challenges of provision of facility based PNC services.

The next chapter will present the discussion of the study findings.

CHAPTER 6

DISCUSSION OF THE STUDY FINDING

6.1 INTRODUCTION

The previous chapter presented the findings of the study. This chapter presents the discussion of the findings in comparison with other studies, reports and documents related with the themes developed under this study. Views and experiences of women and health care workers are discussed under this chapter. Following this chapter, guidelines aiming at improving the quality and utilisation of PNC services will be developed based on the findings of the study.

6.1.1 OVERVIEW OF THE RESEARCH DISCUSSION

This study assessed the views and experiences of health care workers and women on PNC services. The study utilised a qualitative study design and employed the thematic qualitative data analysis techniques which resulted in the emergence of five themes under objective 1, five themes under objective 2, three themes under objective 3, and 6 themes under objective 4.This section interprets and discusses the emerged themes by reviewing relevant literatures and also taking into consideration the health belief model which is the theoretical framework used in this study.

6.2 BIOGRAPHICAL PROFILE OF THE PARTICIPANTS

All of the women who participated in this study gave birth in the past six months which helped the researcher to avoid recall bias and got recent actual experiences and views of the study participants on PNC services. The age of the respondents were also distributed across different age categories which facilitated the exploration and description of views and experiences of the study participants of different age groups. A study conducted in Ethiopia to assess the determinants of PNC use found out that age

was one of the determinants of PNC use showing as age increased the likely hood of going to the health facility for PNC has also increased (Fikrte ,Walelegn, Fekadu & Manaye 2014:2345). This study interviewed both literate and illiterate women which also gave an advantage to the study by incorporating the views and experiences of women with different education backgrounds. In addition, the respondents included both employed and not employed women. A study conducted by Gebrehiwot, Medhanyie, Gidey and Abrha (2018:2) to assess factors associated with PNC services in Ethiopia also found out that educational backroad and employment status were some of the factors affecting PNC utilisation The participant women were also mix of those women who delivered at home and at health facilities supporting the study to capture the views and experiences of women of having different experiences.

This study was conducted to explore and describe the views and experiences of women and health care workers working at different levels of the health system. Assessing the determinant factors of PNC service utilisation was not part of the objective of the study. The study captured views and experiences of women of different religious, educational, employment, and age background which showed association with PNC service utilisation in the studies cited above. In addition, health care workers working at various levels of the health system were also included which gave an opportunity to assess the views and experiences of health care workers planning, coordinating, provide and monitor PNC services.

6.3 WOMEN'S VIEWS AND EXPERIENCES ON UTILISATION OF PNC SERVICE

6.3.1 POOR UNDERSTANDING ON THE IMPORTANCE OF PNC

6.3.1.1 PNC service is considered for sick women or newborn

This study identified that the majority of the interviewed women considered PNC services as something reserved for sick women and sick newborns. They did not consider the service important for apparently health women or newborns.

These findings was supported by a study conducted by Titaley, Hunter, Heywood and Dibley (2010:8) revealing the majority of the women did not visit the health facility for PNC considering it was for sick women or sick newborns. A similar study conducted by Fikrte et al (2014:2347) also showed that women visited the facility during postnatal period if they were or their newborn were sick.

6.3.1.2 PNC visit is considered for family planning and immunisation

This study found out that the women made visit to the health facilities for family to receive family planning services and for child immunisation after six weeks of delivery. Other study conducted in Ethiopia found out the same that most of the women visited the health facilities for immunisation or family planning purposes (Fikrte et al 2014:2343). A similar study conducted in Ethiopia found out that most of the study participants considered the purpose of the PNC visit being to get counselled and utilise family planning services (Gebrehiwot et al 2018:3).

6.3.1.3 Post-natal period is considered as a time of rest

This study noted that the postnatal period was considered as a time of rest considering nothing was going to happen once the delivery is completed. Even the women who delivered in the health facilities would like to go home immediately not knowing the importance of post-delivery follow up. In addition, there was a feeling of healthy once the delivery is done. The women did not see the importance of going to the health facilities when they and their newborn were apparently healthy. This showed that the women lacked understanding of the post-delivery complications that may arise on her and her newborn and could be identified earlier if she visited the facilities for PNC check-up.

A study conducted in Southern Region of Ethiopia showed that mothers who had knowledge on the danger signs of pregnancy and had a feeling of susceptibility were more likely to use PNC services (Abebo & Tesfaye 2018:6). A similar study conducted by Hordofa et al (2015:689) also showed that women did not know that they were supposed

to go to a health institution after they had given birth at home. They only visited health facilities when they encountered complications.

A qualitative study conducted in Nigeria to assess the perspective of traditional birth attendants on PNC showed referral for PNC services were not necessary unless otherwise the mother of the newborn felt sick and considered the post delivery period as a safe period where nothing serious would occur (Chukwuma, Mbachu, Cohen, Bossert & McConnell 2017:8). Lack of knowledge about post-delivery complications also noted in a similar studies conducted in Ethiopia indicating only few proportion of the respondents were knowledgeable about the post-delivery danger signs. Specially women residing in rural areas were not able to mention at least two of the post delivery danger signs (Amenu, Mulaw, Seyoum & Bayu 2010:26).

6.3.2 LIMITED KNOWLEDGE OF NEONATAL DANGER SIGNS

6.3.2.1 Sign and symptoms considered worthy of visiting the health facility

Postnatal period is a crucial period for the mother where most of the life-threatening server complications may arise. An analysis made from WHO dataset showed that haemorrhage was the leading cause of death worldwide accounting to 27.1% of all deaths. Of all maternal deaths secondary to haemorrhage, more than 67% of them were owing to postpartum haemorrhage. Hypertension was the second most common cause of death accounting 14% of the total deaths. Maternal deaths owing to sepsis was 10.7%, abortion represented 7.9% of deaths and the rest 12.8% was taken by embolism and other direct causes of maternal mortality (Say et al 2014:326).

Several complications on the newborn can also occur during post-natal period. The WHO PNC guideline reported that about 40% of neonatal deaths occur in the first 24 hours of life. Of these deaths, about 75% of them are related with asphyxia and 40% of them happen owing to prematurity. Prematurity and sepsis related deaths account for 40% of neonatal deaths and 25% of asphyxia-related deaths happen in the 1-7 days period. In

addition, 30% of sepsis-related deaths occur in the second week of life and 25% occur in the last two weeks of neonatal period (WHO 2013:17).

This study found out that of the major causes of maternal mortality was only bleeding mentioned as complications. Some of the participants mentioned fever, vomiting and diarrhoea as major complications required immediate medical attentions. This lack of knowledge on the major health risks after delivery was also reported in another study conducted in Tanzania in which 66.3% of women did not mention any maternal danger sings and 58.2% of the respondents were unable to mention any neonatal danger signs (Moshi, Ernest, Fabian & Kibusi 2018:11).

6.3.3 INADEQUATE IEC AND COUNSELING SERVICES ON PNC

6.3.3.1 Lack of information and awareness about PNC

Most of the participant women reported that they did not have information about PNC services and they did not know the importance of utilising PNC services. Had they been informed, they would have considered to visit the facilities for PNC services. Some of them have also claimed that they received information about immunisation services only that is given for the newborns. This finding was supported by other studies conducted to assess the factors associated with PNC service use in which most of the women who utilised PNC services were the one had information about it and knew the health benefits of undergoing PNC visit. Another study conducted in Kenya showed that utilising ANC services has increased the likelihood of PNC service utilisation.

The study also found out that when a woman gets adequate information about maternal health services during ANC visits, the likelihood of accessing PNC services is increased (Akunga et al 2014:1455).

6.3.3.2 Women received inadequate information

The study participants reported that they had received information about child immunisation and were told to come back after 45 day. They also reported that they had also received information about the availability of family planning services and the importance of spacing birth. However, they were not informed about the need of visiting the health facility for postnatal check-up. A similar study conducted to assess the quality of antenatal and PNC services showed that the quality of post-delivery counselling services provided to the women were suboptimal not covering the essential practices that have to be undertaken following delivery (Mirkovic, Lathrop, Hulland et al. 2017:7).

6.3.3.3 The effects of late stage ANC visit on counselling services

The majority of the women interviewed used ANC services though not completed the full recommended visit. During ANC visits, apart from the care provided before pregnancy, the health care workers reportedly provided counselling and advise to the women to deliver in the health facilities and also advised them on the care needed for herself and the newborn post-delivery. However, most of them started ANC visit at late stage of pregnancy and gave birth before reaching to the fourth visit. A study conducted to assess the predictors of PNC services identified that women who utilised four or more ANC were likely to utilise PNC services (Larsen, Cheyip, Aynalem, et al. 2017:10).

6.3.3.4 Counselling services during ANC

The study participants expressed the importance counselling services provided during ANC service for the improvement of the subsequent utilisation of maternal health services. Offering counselling service while the women were in labour or counselling service after delivery may not have a bigger impact. In addition, it was suggested ANC services be started at earlier stage of pregnancy to get adequate time for counselling services. A study conducted to assess the contribution of ANC service for utilisation of delivery and PNC services showed that those women who were counselled about delivery and PNC during their ANC visits were more likely to receive PNC services (Do & Hotchkiss 2013:5). Another study conducted to assess the continuum maternal health

services indicated that women who used ANC services more than four times were more likely to receive PNC services (Sakuma, Yasuoka, Phongluxa & Jimba 2019:8).

6.3.3.5 Information given during post-natal period

The study finding showed that the women received partial information about the care required and the danger signs that she should be aware of. The study participants reported that they had received information about the care to be given for vaginal tear, importance of breastfeeding and keeping her own personal hygiene and that of the newborn. This finding was also supported by a study conducted by Chimtembo et al (2013:346) showing the information the women received on discharge was not completed in which only 69% of the midwives told the women about pregnancy danger signs. The majority of them were giving information pertaining to breastfeeding practices and family planning use.

6.3.4 EXPERIENCES OF WOMEN ON FACILITY BASED PNC SERVICES

6.3.4.1 Causes of dissatisfaction

This study identified some of the dissatisfaction factor hindering the women to utilise the available maternal health services in the area. Most of the women indicated that they were required to bring their visit card when they visited the health facilities to access services which sometimes they lost. The lack of close follow-up and encouragement by the birth attendants during delivery and after delivery were some of the discouraging factors. In contrast, having compassionate health care providers was one of the driving factors to utilise maternal health services.

This finding was supported by a study conducted in Ethiopia to assess the women's dissatisfaction factor indicating women were not satisfied with the care they received from the midwife during labour (Naghizadeh, Kazemi, Ebrahimpour & Eghdampour 2013:137).

6.3.4.2 Health care workers approach towards clients

The Federal Ministry of health Ethiopia prioritised the importance of ensuring the availability of compassionate respectful and caring (CRC) health care workers in the country by making CRC as one of strategic objectives in the health sector transformation plan of the country (FMOH 2015b:95). The WHO has also emphasised the importance of providing maternity with care and in respectful way as UNCRC is part of the UN human rights declaration, child bearing is valuable and culturally sensitive in different part of the world as well as not being respectful affects the utilisation of subsequent maternal health services (WHO 2018).

The study participants gave a mix of responses regarding health care providers approach and manner of service delivery. Some of them mentioned the health care workers were caring and respectful. However, the majority of them refuted this assertion. Even some of them did not receive the services they were expecting to receive. Some of the women were also denied some services available in the health facilities owing to lack of commitment by health care workers. In addition, this study reported that some of the women were required to wait for longer hours in the health facility to receive PNC services which created discomfort and discouraged the women to visit the facility for subsequent maternal health services.

A study conducted in Ethiopia to assess the client satisfaction on maternal health services also found out that women who delivered in the health facilities encountered neglect and verbal abuses by the health care provides which discouraged them to stay in the health facilities for PNC services and also was also among the inhibiting factors to utilise the subsequent maternal health services provided in the health facilities. A similar study conducted in Iran also found out that women were treated without respect and most of them were verbally and physically abused by the delivery attendants (Naghizadeh et al 2013).

6.3.5 HARMFUL TRADITIONAL PRACTICES DURING POSTNATAL PERIOD

6.3.5.1 Uvulectomy

This study revealed that harmful traditional practices such as cutting uvula when the newborn get sick is being practiced in the community. As some of the women reported, cutting of uvula is done secretly and is usually done after administering some kinds of herbal medicines. There were also newborns who died owing to non-stop bleeding following the cutting of the uvula.

Uvulectomy is found to be a well-documented common practice in sub-Saharan African countries. A study conducted in Tanzania found out that 1% of children had had Uvulectomy and presented with symptoms like fever, tachycardia and tachypnoea to the hospital (Sawe, Mfinanga, Ringo, et al. 2015:4). Furthermore, another study conducted in Nigeria also showed that 32% of children undergone Uvulectomy of whom the majority of presented with major complications such as such as throat pain and haemorrhage (Adoga & Nimkur 2011:2). In Ethiopia, a cross sectional study conducted to assess factors associated with harmful traditional practices showed that more than 87% of the interviewed women practiced one of the traditional practices of which more than 86% of them had their children cut their Uvula (Gebrekirstos, Abebe & Fantahun 2013:4).

6.3.5.2 Application of Lemon Juice on top of the head

This study identified that pouring lemon juice and sugary water on top of the newborns head during sickness was a common practice in the community. This pouring of lemon juice on top of the head is done when the uvula is swollen or when a child is unable to take breast milk. These kinds of traditional practices were also found by a study conducted to assess newborn care traditional practices in Ethiopia which found out that the application of lemon juice mixed with ash were put on neonate's head for the treatment of tonsillitis (Anmut, Fekecha & Demeke 2017:3).

6.3.5.3 Application of butter on the newborn's body and the umbilical stump

This study revealed that the majority of the women did apply butter on the umbilical cord believing that it will help the umbilical stump to fall off easily. They also anointed the newborn with butter after bathing. These findings are also supported by a study conducted in Ethiopia indicting the application of butter on umbilical stump and the application butter all over the body was a common practice in Ethiopia. The mothers did this considering it will fasten the umbilical wound healing process (Callaghan-Koru, Seifu, Tholandi, et al. 2013:4).

6.3.5.4 Giving sugary water to newborns

Some of the study participants reported that there were some women who did give sugary water for the newborn. Some of the participants also said they received health education from the health care workers and they only give breast milk to the newborn. The practice of administering sugary water to the newborn was also reported by a study conducted in (Callaghan-Koru et al 2013:5).

6.3.5.5 The practice of bathing a newborn

Neonatal hypothermia which classified as mild, moderate or server depending on the body temperature of the neonates is one of the causes of neonatal morbidity and mortality in developing countries. Thermal care for all newborns irrespective of place of delivery is recommended by WHO. One of the recommended strategies to prevent neonatal hypothermia is to delay bath for at least 24 hours (Mullany 2010:432).

Nevertheless, this study has identified that bathing the baby immediately after birth was a common practice in the community. For the majority of the interviewed women, there were lack of knowledge about the importance of delaying bath, especially for home deliveries the birth attendants washed the baby immediately after birth. The babies are bathed immediately for the purpose of keeping their hygiene.

Some of the women who delayed bathing for different reasons regretted for doing so. A study conducted in Ethiopia to assess newborn care practices found out that 24.2% of the newborn were bathed within 24 hours (Semanew, Etaye, Tizazu, Abebaw & Gebremedhin 2019:4).

6.3.5.6 Women are not allowed to go out during PNC period

The study discovered that there are deep rooted traditional beliefs in the study area prohibiting the women from going out for about two months following delivery. Going out of home on day time during PNC period was believed to bring some kinds of illness to the women. Even when the newborn was sick or for vaccination visit, the family would take the newborn to the health facilities.

A study conducted in Ethiopia to measure the association between perinatal cultural practices and post-natal common mental disorders reported high prevalence of traditional practices such as restriction of women to stay at home for extended period following delivery and receive support from the relatives. Not doing so was believed to bring different health problem on the women (Hanlon, Medhin, Alem, et al. 2010:472). Another study conducted in Nepal to assess cultural practices and belief during post-natal period reported that women were placed in stable for about 40 days which was the number of days required to be clean (Sharma et al 2016:4)

A qualitative systemic review conducted to assess the traditional practices during pregnancy and following delivery also reported a variety of beliefs and practices conducted in different parts of the world. In most of the culture postpartal period is considered as a time of rest and avoidance and household chores. Non-adherence to these traditional practices was considered to bring variety of health problems (Dennis, Fung, Grigoriadis, Robinson & Romans 2007:497).

6.4 VIEWS AND EXPERIENCES OF HEALTH CARE WORKERS ON PNC

6.4.1 SUBOPTIMAL PROVISION OF PNC SERVICES

6.4.1.1 Mix of views of HCWs on the use of PNC

This study has shown that the health care workers perceived PNC as an important intervention to the woman and the newborn. Reportedly, they also provided information to the women about the care needed to herself and the newborn on discharge. Nevertheless, this study found out that there was a tendency of considering only midwives were the service provider for PNC services. In addition, this study also found out that the health extension workers who were supposed to provide house-to-house PNC services underestimated the importance providing PNC service and did not see the importance of traveling long distance or spending on transportation to visit an apparently health women. This might be attributed to insufficient preparation and training by the health extension workers to clearly understand the post-delivery complications that may occur on the women and the newborn. A task analysis conducted on the health extension workers found out that most of the health care extension workers were not practicing what they were supposed to do and also, they were found to be not prepared for the task (Desta et al 2017:4).

6.4.1.2 PNC does not get much attention

The study finding announced that PNC service provision does not get much attention by the health authorities as well as health care workers working in the facilities. More attention has been given to increase institutional delivery and prevention of communicable diseases such as HIV, especially the subsequent PNC services following the discharge of the women from the facility has got less attention. The study participants expressed that PNC is not usually raised as a main agenda during health service performance evaluations or review meetings.

In Ethiopia, there has been huge commitment from the government in the development of favourable policies, guidelines and strategies to increase the maternal, neonatal and child health service accessibility and qualities in the past decades. This favourable ground has resulted in improvement of some of the service uptake indicators such as ANC and EPI related indicators. However, there was only little improvement in the utilisation skilled birth attendance rate and almost no improvement in the utilisation of postnatal care services where about 83% of delivered women did not utilise the services for their last birth (Central Statistical Agency of Ethiopia & ICF International 2016:139).

6.4.1.3 Ineffective PNC service provision

PNC is one of the programmes of the health extension programme under the family health component in which the health extension workers are supposed to provide the service at the health post as well as at the household level. Nevertheless, another study was conducted in Ethiopia to assess the role of health extension workers in improving the utilisation of maternal health services in rural Ethiopia. The study showed that though the health extension workers have contributed substantially to the improvement in women's utilisation of family planning, ANC and HIV testing, their contribution towards improvements of skilled delivery and postnatal check-up were insignificant. Less favourable working conditions at the health posts, high workload and walking long distances to reach the mothers' house were cited as reason for low performances (Medhanyie, Spigt, Kifle, et al 2012:7).

This study has also found out that though the health extension workers are required to provide the subsequent PNC services at household level, it was not being implemented owing to various challenges. Some of the factors included difficulties of knowing who has delivered when owing to difficulties of travelling long distance on foot specially during rainy seasons and also owing to shortages of basic supplies and equipment needed to provide counselling services. A study conducted in Southern Ethiopia to assess home-based neonatal care practices of health extension workers supported this finding reporting with only 12.4 % of women received home visit in the first one month following

delivery of whom only 26.2% of them received the visit in the first 24 hours (Gebretsadik, Alemayehu, Teshome, Mekonnen & Haji 2018:150).

6.4.2 LIMITED MEDICAL EQUIPMENT, SUPPLIES AND DRUGS FOR PNC SERVICES

6.4.2.1 Shortage of beds as a reason for early discharge

This study identified that early discharge from health facility was a common phenomenon in most of the health centres. One of the reasons given for early discharge was shortage of beds and shortage of rooms to accommodate more women. However, some of the health facilities mentioned that they did not have shortage of beds as the facility delivery utilisation was very low and they did keep women for about 24 hours in the health facility closely following up her and the newborn. A study conducted by Kaba, Bulto, Tafesse, Lingerih and Ali (2015:97) in Ethiopia also found out that shortage of beds and rooms were one of the factors for early discharge of the women from the health facilities after delivery.

6.4.2.2 Lack of medical equipment maintenance unit

It is known that the availability of medical equipment used for prevention, diagnosis or curative services are crucial to the delivery of quality medical services. The absence or dysfunctionality of medical equipment greatly affects the delivery of medical services (Moyimane, Matlala & Kekana 2017:2). This study identified that some of the medical equipment used for newborn care services were not functional or not used at all owing to lack of knowledge on how to use them. A study conducted in Oromia Region of Ethiopia also found out that more than 35% of the medical equipment were not functional or not used by the health care workers (Ademe, Tebeje & Molla 2016:3).

6.4.2.3 Shortage of BP apparatus and thermometer

Data from the current study showed that shortage of BP apparatus was one of the problems affecting the provision of PNC services. The health extension workers were supposed to borrow even from other kebeles for temporary use and also most of the new BP apparatus purchased get easily broken down. Some of the health extension workers interviewed also mentioned lack of basic medical equipment such as thermometer at the health post level which made it impossible to measure the body temperature of the women and the newborn.

The shortage of essential medical equipment and supplies is a chronic problem in the country reported by wide range of studies conducted in Ethiopia. For instance, a study conducted to validate the health extension workers motivation found out that lack of shortage of basic medical equipment and supplies was one of the demotivating factor for the health extension workers in Ethiopia (Mohammed et al 2015:4).

6.4.2.4 Shortage of essential drugs and supplies

Essential antibiotics, emergency drugs, IV fluids, TTC and Vitamin K are some of the medical supplies that should be available at the health facilities during delivery and PNC period. In addition, consumables such as gloves and detergents should be also available at the health facilities in all times. The absence of this may lead to serious health consequences endangering the life of the newborn and the women (Malhotra, Zodpey, Vidyasagaran, et al. 2014:134).

In this study, most of the study participants reported shortage of essential supplies and drugs such as vitamin K and TTC. These supplies were in short in the facilities since long time ago. A study conducted in India found out that the availability of medical equipment and supplies for maternal health services was associated with the increased utilisation of antenatal and postnatal services. The unavailability of a labour/examination table and bed screen is associated with a reduction in the number of deliveries and postnatal services.

6.4.2.5 Shortage of antibiotics and medical supplies for ICCM

The integrated community case management (ICCM) was launched by WHO and UNICEF in 2012 to treat the most common causes of morbidity in under five children which are malaria, pneumonia and at community level close to where the people resides specifically in areas where there is limited access to health facilities(WHO/UNICEF 2012:2). In Ethiopia, ICCM is being implemented by the health extension workers at community level.

This study reported the shortage of antibiotics and medical supplies to provide basic curative health services by the health extension workers, especially ICCM services to be provided by the health extension workers were not being implemented owing to shortage of first dose antibiotics. In another study conducted to assess the challenges of health extension workers, shortage of antibiotics and supplies were also reported by the health extension workers (Mohammed et al 2015:4).

6.4.3 LINKAGE AND COMMUNICATION AT DIFFERENT LEVELS OF THE HEALTH SYSTEM

6.4.3.1 Health extension workers need to be closely followed

The study participants reiterated the need of close supportive supervision to the health extension workers to keep them motivated to their work. This supportive supervision was also suggested to make sure that the health extension workers are doing what they are supposed to do. A study conducted on the motivation factors of health extension workers also identified that close supervisory engagement was on the motivation factor (Mohammed et al 2015:3).

6.4.3.2 Inadequate supportive supervision to the health posts

This study has identified that the health centres conducted supportive supervision to the health posts to improve the PNC service provided by the health extension workers.

However, this supportive supervision was not conducted frequently owing to the shortage of work force and transportation facilities from the health centres. This finding is also supported by the government report issued by Federal Ministry of Health indicating weak supportive supervision practices by the health centres and district health offices to the health extension workers owing to shortage of work force and lack of transportation facilities (FMOH 2018a:59). A study conducted in Ethiopia to assess the relationship between health extension workers and health care workers showed that the supportive supervision received by the health extension workers were infrequent and focused on finding faults and mostly focused on checking records and reporting more than providing support to health extension workers (Desta et al 2015:4).

6.4.3.3 Poor communication between HC and HP

This study found out that there was poor communication between the health centre and health posts regarding exchange of information pertaining to delivery status of the women who delivered in the respective health centres. There were no established means of communication between the health centres and health posts to inform health extension workers on who has got delivered from their catchment areas and also inform them on the required kinds of PNC services to the women and the newborn. This poor communication between the health posts and the health centres was also reported on the study conducted in Ethiopia which reported that lack of referral forms and feedback mechanisms were the contributing factors for poor communication between the health centre and the health post (Desta et al 2015:4).

6.4.3.4 Irregularities on PNC service report by the health extension workers

Accurate and timely collection and analysis of data are essential to make informed decision at lower and higher level of health systems and also has a paramount importance to influence policy changes and be used as an input to design a better interventions (AbouZahr & Boerma 2005:579).

This study found irregularities and inconsistency on PNC performances reported at different level of the health system. Most of the health extension mentioned that they reported second and third visit postnatal services knowing that they did not reach on time for PNC services on the recommended visit period. Some of the health extension workers did not report at all believing if they had not reached on time it was not appropriate to report.

This study has identified that the PNC report submitted to higher levels were not consistent from facility to facility. Some of the time they reported all skilled delivery attendance as PNC. Sometimes they added the second and third home visit of the health extension workers into the first visit PNC, and some of them were reporting the actual PNC service given to the women. A study conducted in Ethiopia found out that there was discrepancies between the data recorded from the health facilities in the routine health information system report and with the service utilisation estimate done form community surveys. Especially the facility based reports on MCH service utilisation was found to be over reported (Ouedraogo, Kurji, Abebe, et al. 2019:9).

6.4.3.5 Health care workers review meeting to measure performances

Measuring health services performance is necessary to understand the status of the service delivery, the challenges and to better design activities that will improve the performances and ensuring the delivery quality health services to the community (Sharma, Prinja & Aggarwal 2018:175). According to the FMOH Health Information use guideline, the health care workers are supposed to hold a meeting on a monthly basis to deliberate on the performances of key performance indicators of the health services (FMOH 2013b:17). These kinds of meetings were also being used to discuss on the challenges of delivering health services and develop an action plan to be realised in the upcoming periods. Having a performance review meetings were also dubbed as one way of improving the health service performances.

The study finding showed that the district health authorities in the study areas usually conduct review meetings to review the performances of the health services in the area through presenting performances of the health facilities on key indicators and also discuss on the subsequent plan of the facilities. These review meetings were also being utilised to bring up issues raised by the community hindering the women from utilising the health services in the area and discussed on the necessary interventions that have to be implemented to improve the PNC service utilisation.

6.4.4 AVAILABILITY OF HEALTH CARE WORKFORCE FOR PNC SERVICES

6.4.4.1 Shortages of Midwives

According the standard developed by FMOH depicting the required number of staffs and other infrastructural related requirements for a health centre, each health centre should have at least three midwives (FMOH 2012:28). However, most of the study participants raised their concern about the adequacy of this number especially in areas where there are many demands for maternal health services.

Some of the health facilities reported shortage of midwives to provide maternity health services. Moreover, the number was not adequate to cover for others during annual leave, sick leave or absences. The respondents emphasised the importance of assigning adequate number of midwives in each of the health centres to ensure the provision of optimum health services. It is not possible to ensure the provision quality health services without having adequate number of health care workers. A study conducted in China to assess the impact of having adequate number of health care workers on the quality of health services showed that the availability of adequate number of health care workers has significantly improved the quality of health services (Jin, Zhu, Yuan & Meng 2017:6).

6.4.4.2 Shortage of HEWs

The study has learnt that in some of the wider kebeles, the number of health extension workers providing services were not adequate enough to make house-to-house visit and provide PNC services. The shortage of health extension workers in some of the kebeles with large geographical coverage and large number of population was also identified as a challenge in the health extension program evaluation report of the FMOH (FMOH 2018:21).

6.4.4.3 Complaints of the upgraded health extension workers (Level 4 HEWs)

The government of Ethiopia has initiated a level 4 health extension training programme to upgrade the already existing level 3 health extension workers and expand and improve the level of services provided at the health post level. The level 4 HEWs will receive a diploma after they have completed one-year training. They are going to be assigned at the same health post they have been working as level 3 (Desta, Shifa, Dagoye, et al. 2017:6).

However, this study found out that the upgrading of the health extension workers to level 4 was not coupled with improved opportunity to exercise what they have learnt. The infrastructures and the working conditions were found to be same as they were before. The professional names given to the upgraded health extension workers were not found to be attractive to the health extension workers. The majority of the interviewed health extension workers were complaining that they were doing the same activities at the same level as before.

6.4.5 POOR INFRASTRUCTURE FOR PNC

6.4.5.1 Needs of upgrading the existing health posts

This study found out that most of the health posts were in poor conditions with dilapidated infrastructure and with no water and electric supply. The interviewed health care workers expressed their concern on how the existing health posts would be used to provide health

services and also questioned the suitability of the existing health posts to provide health services designated to the level 4 health extension workers. The findings of this study about the situation of the existing health posts was supported by a government report issued by Federal Ministry of Health indicating less than 5% of the health post had grid power supply, 29% of the health posts had grid or solar power supply, only 3% of the health posts had tap water and only 45% of the health posts had improved water sources (FMOH 2018:34).

6.4.5.2 Lack of a dedicated room for PNC, shortage of electric and water supply

The availability of water and electricity is necessary to guarantee the provision of quality maternal health services in the facility. Their availability will facilitate infection prevention activities, help health care workers and patients protect themselves from getting hospital acquired infection, improves staff moral and contribute to client satisfaction (WHO 2015b:15).

This study identified that there was shortage of PNC rooms in the health facilities to make the women stay for at least 24 hours in the facilities to provide PNC services. There was also shortage of electric power and water supplies in most of the health facilities. Owing to this, women who gave birth in the health facilities were not able to keep their personal hygiene after delivery. This was identified as one of dissatisfaction factor to deliver in the health facilities. A study conducted in Ethiopia to assess the socio-cultural determinants of home delivery showed that one of the factors hindering the women from accessing health facilities for delivery services were poor infrastructure of the health facilities (Kaba et al 2015:100). A study conducted to assess the supply side factors affecting the maternal health service utilisation found that the availability of facilities, such as water, telephones, toilets, and electricity, were crucial to provide quality health services (Singh, 2016:13).

6.5 FACTORS FACILITATING THE UTILISATION OF PNC SERVICES

6.5.1 AVAILABILITY OF HEALTH INFORMATION AND INCENTIVES

6.5.1.1 Post-delivery danger signs listed on EPI card

Different studies conducted to assess factors associated with PNC showed that having awareness about the post-natal danger signs were associated with PNC services utilisation. A study conducted in Tanzania on PNC service showed that knowledge of danger signs was strongly associated with PNC service utilisation. The source of information about post-delivery danger signs were health facilities and during social gathering (Mwilike, Nalwadda, Kagawa, et al. 2018:4). Another study conducted in Ethiopia also showed that knowledge of the women on post-delivery danger signs were very low. Those women who had the knowledge of danger signs were highly likely to utilise PNC services (Maseresha, Woldemichael & Dube 2016:5).

This study found out that information about the danger signs of pregnancy were listed on the EPI card which was given for women when they come back to facility for immunisation services after 45 days of delivery. These kinds of information should have been given to the women on discharge so that the women may identify when the danger signs occur and seek immediate medical care. In addition, the danger signs information was not written in the language widely spoken in the area.

6.5.1.2 Source of information for immunisation and breastfeeding

This study identified that women got information about immunisation services from the health care workers when they were discharged after delivery and also from the health extension workers during home visits. The majority of them got information about breastfeeding practices from their neighbours. A study conducted in Northern Ethiopia showed that women who delivered in the health facilities were more likely to get their children immunised (Kassahun, Biks & Teferra 2015:5). This may be due to the fact that the received information about child immunisation on discharge.

6.5.1.3 Provision of baby kits as incentives

This study found out that baby kits which include baby cloth, towels and cleaning soaps were provided to the women who delivered at the health facilities. These kinds of incentives were given to the women with the support of a development partner working in the area. It was believed by the health care workers that these kinds of incentives highly attracted the women to access maternal health services in the area. A study conducted in Uganda to assess effects of demand-side incentives in improving the utilisation of delivery services also found out that, providing baby kits to the women has increased the utilisation of institutional delivery rate there by facility based PNC services (Massavon, Wilunda, Nannini, et al. 2017:10).

6.5.2 EXISTENCE OF DEMAND CREATION INTERVENTIONS

6.5.2.1 House to house health education by the HEWs

The health extension programme of Ethiopia was launched in 2003 for the purpose of delivering the major preventive, health promotive and basic curative services closer to the community. This health extension programme is implemented through construction of one health post per 5000 population and staffing it with two female health extension workers. The health extension workers are supposed to implement 16 health packages categorised under disease prevention, family health and hygiene and environment sanitation. The health extension workers are supposed to spend 75% of their time making home visit providing the health services in the aforementioned categories (Wang et al 2016:60).

The study findings showed that the health extension workers working in the study area made regular house-to-house visit to teach the households on different health agendas. Whenever they encountered a pregnant woman they provided information about the advantage of institutional delivery and the health consequences of delivering at home for the mother and the newborn. In addition, for women who had already given birth, they

provided information about the post-delivery danger signs that may occur on the mother and the newborn. They also checked the health status of the women and the newborn and also taught and demonstrated about proper breastfeeding practices. Moreover, to prevent neonatal sepsis, they also provided information about the care needed to the newborn.

Nevertheless, the majority of the women who participated in this study contradicted the claim of regular home visit reported by the health extension workers. They refuted claims that they have never received a visit from the health extension workers neither during pregnancy nor during the postnatal period.

This inadequacy or absence of home visit by the health extension workers was also supported by a study conducted by Negussie and Girma (2017:7) which identified that the contribution of the health extension workers towards maternal health service coverage such as ANC, SBA and PNC was insignificant. In addition, the number of house-to-house visit made by the health extension workers was inadequate to bring about behavioural changes to the pregnant women. A study conducted by Tafesse, Gesessew and Kidane (2019:7) also identified that urban health extension workers managed to visit only 57% of the total households in their catchment areas. A similar study conducted in Ethiopia to assess the frequency of home visits made by the health extension workers also found out that the health extension workers made home visits only to 52.7% of the households in their catchment area (Yitayal, Berhane, Worku & Kebede 2014:6).

6.5.2.2 Existence of participatory learning and action (PLA) facilitators

PLA groups, owned by local communities, will seek to bring about improvements in MNH and reductions in mortality by creating a space for discussion where community members, and women in particular, are able to identify priority MNH problems and develop, implement and evaluate their own locally feasible solutions. This PLA groups are led by PLA facilitators who were trained to facilitate series of women group meetings in the community (WHO 2014:2).

This study showed that the existence of PLA facilitators and PLA groups in the community in one of the study district has contributed immensely towards improvement in awareness of the community towards MNCH services and also increased utilisation of MNCH services. The PLA facilitators have also created a very good collaboration and linkage with the health extension workers and effectively conducted awareness raising activities and mobilise the community to utilise the existing health services in the community.

6.5.2.3 Health extension workers utilising community gathering

Offering health education to the community has a paramount importance to bring about behavioural changes. Health education improves the knowledge and awareness of the community and also increases the decision making ability of the person to make an informed decision (Hahn & Truman 2015:660).

This study has learnt that the health extension workers has used the existing social gatherings such as coffee ceremonies and saving groups to educate the community. As noted by Jefferies, Mathewos, Russell and Bekele (2014:7), the health extension workers allocated some of their time to conduct outreach community mobilisation activities.

6.5.2.4 Participatory learning and action meetings

This study identified that participatory learning and action meetings was one of the ways of awareness creation about MNCH service, increasing health services utilisation and health seeking behaviours and also capacitating the community to find local solutions for the day-to-day problems they are facing with hindering them from utilising the available health services in the area. These series of meetings were reported to play a great role towards improving the utilisation of maternal health services in the area.

Participatory learning and action approach was developed and recommended by WHO as a tool for community mobilisation in health promotion activities specifically for maternal

and neonatal health services (WHO 2014:14).A study conducted in Malawi to assess the effectiveness on the PLA approach towards improving MNH services found out that the approach could improve neonatal mortality if it is combined with facility interventions to improve quality of health services (Colbourn, Nambiar, Bondoet al. 2013:193).

6.5.2.5 Pregnant women's conference

This study revealed that pregnant women conferences were being held at kebele level once per month. The health extension workers and the health care workers working in the health centres facilitated these pregnant women conferences. These conferences were being used by the health care workers to inform the community about maternal health services such as ANC, delivery and PNC services. More importantly, these conferences had also created a good opportunity for pregnant women to learn from one another, share experiences, and encourage each other to utilise the existing health services. However, this study has also identified that for the majority of the conferences, it was only women who participated in the conferences.

The impact of pregnant women conference was measured in Ethiopia by a study conducted by Asresie, Abitew, Bekele and Tesfaye (2019:5) which indicated women who participated in pregnant women conferences were found to utilise maternal health services better than the others and also registered a better knowledge in mentioning pregnancy related danger signs. A report produced by Save the Children also dubbed pregnant women conference as a means of improving demand for maternal health services, as well as encouraging one another to seek care whenever required (Tigneh 2016:2).

6.5.2.6 Awareness raising events as a driving force to follow up PNC services

This study identified that getting information about PNC services and grasping knowledge about it would significantly improve the utilisation of the service. A study conducted by (Bupe, Mulenga &James 2016:15) to assess the factors associated with PNC service

utilisation also found out that women who had the awareness and knowledge about PNC services through media exposure utilised PNC services more the others. Another study conducted to assess the determinants of PNC service use also found that having awareness about PNC through media exposure was one of the determinant factors for PNC service utilisation (Bwalya et al 2017:5).

6.5.3 EXISTENCE OF SUPPORTIVE TRADITIONAL PRACTICES

6.5.3.1 Visiting a woman during postnatal period

This study found out a very interesting traditional practice being conducted in the community through visiting a woman during her postnatal period. During the visit, porridge is prepared for the visitors, people eat together and socialise. However, women who did not visit other women during the postnatal period will reciprocally not receive visit from that women in return. Fearing this visiting a woman during her postnatal period is a common traditional practice in the area. The visitors also provided support to women in preparation of food, provide care for herself and the newborn. The husbands were also reportedly supportive in terms of arranging transportation provide other supports during delivery and perinatal period. This is considered very important tradition and makes the women forget all the labour pain she has passed through. Such kinds of visiting practices was also reported by a study conducted in Oromia Region where the study found out that 64.5% of the women reported they had received visit from family or relatives during perinatal period and this visiting was found out be protectives of postpartum depression (Tefera, Erena, Kuti & Hussen 2015:5).

6.5.3.2 Abdominal massage and support

The study participants indicated that abdominal massage was done for them post-delivery by the family members. They also applied local belt to support the back and the abdomen following delivery. These kinds of abdominal massage practices which was considered to

improve blood circulation has been practiced in many Asian countries (Dennis et al 2007:496).

6.5.3.3 Contribution of flour by the community and having traditional practices at the health facilities

The study participants indicated that the community members contribute a kilo of flour and one birr on annual basis that is collected by the health extension workers and kept in the health centres for making porridge and coffee to the women after delivery which is one of the traditional practices in Ethiopia accompanying delivery. These traditional practices were organised at the health facilities for making the women feel welcome and thereby increase institutional delivery services. Some of the health facilities have also hired a person for the purpose making porridge and coffee to be served for the delivered women and her family members. A study conducted in Peru to assess the impact of incorporating cultural practices in the health facilities registered a significant increment in institutional delivery by increasing the coverage from 6% to 83% in a few years period cultural incorporating traditional showed that the practice of making traditional practices such as coffee and porridge at health facilities has increased the interest of the women to deliver in the health facilities (Gabrysch, Lema, Bedriñana, et al 2009:725). The finding of this study is also supported by a report produced Federal Ministry of Health indicating traditional Ethiopian coffee ceremony and eating porridge after delivery was being practiced in most of the health facilities in Ethiopia boosting the institutional delivery rate (FMOH 2013a:76).

6.5.3.4 Practice of breastfeeding

This study has learnt that the majority of the women interviewed had good practices of breastfeeding. The health care workers also reported that they taught about breastfeeding and demonstrated the proper positioning for breastfeeding. More importantly, Breastfeeding a newborn was found to be a common practice in Ethiopia. Different researches conducted on newborn care practices have documented high prevalence of

breastfeeding practices. For instance, a study conducted in Oromia Region where this study has been conducted reported that 82.2% of the study participant exclusively breast fed their newborn (Bayissa, Gelaw, Geletaw, et al. 2015:5).

6.6 FACTORS HINDERING THE UTILISATION OF PNC SERVICES

6.6.1 TRAVEL RELATED BARRIERS FOR MAKING PNC VISIT

6.6.1.1 Farness of the health facilities to the women

The women's willingness and ability to access PNC services is affected by the distance of the facility from the health facility. Living in either urban or rural settings is also among the factors affecting PNC service utilisation. This is evident from the EDHS 2016 in which 45% of urban women utilised health care services while it was only 13% for women residing in rural settings (Central Statistical Agency of Ethiopia & ICF International 2016:140). A study conducted in Kenya also identified that women residing urban settings were 1.42 times more likely to use PNC services than those women living in rural settings (Akunga et al 2014:1456).

The study participants residing in rural areas mentioned that distance of the health centres from their home and shortage transportation facilities were among the factors hindering them from utilising PNC services. A similar study conducted in Ethiopia also showed that distance of the health facilities from the home was one of the factors hindering the women from utilising PNC services (Gebrehiwot et al 2018:5).

6.6.1.2 Farness of residential location of the HEWs from the health post

This study identified that the majority of health extension workers live very far away from the health post. Most of them live in towns not in the kebele where they were assigned for the work. They are supposed to walk every morning to the health post and go back to their house in the afternoon. They usually get to the health post late and leave early.

When the health extension programme was designed the plan was to recruit health extension workers who live in the same kebele where the health post is located. However, this study found out that most of the health extension workers did not live in the kebele where they were assigned. This finding is supported by a research conducted to assess how the health extension workers allocated their time which identified that only 35% of the interviewed health extension workers lived in the area where they were working and the majority of them walked for 50 minute to reach to the health posts (Jefferies et al 2014:4).

6.6.1.3 Ambulance transportation services

Though ambulance services were operational in the study area, the study participants gave a mix of responses about their utilisation. Some of them said they did call to the ambulance number and received transportation service to go to the health facilities for delivery services. However, some others said they did not have the ambulance phone number and could not dial to them. They were also women who did call to the ambulance but learned that the ambulance was not available at the time of the call. This finding is supported by a study conducted to indicating the use of ambulance services is different in different woreda where in some of the woreda labouring women were getting Ambulance services even during night and in some other woreda it was not possible to accesses ambulance services for labouring women where they were advised to use public transport services (Jackson & Hailemariam 2016:474).

6.6.1.4 Shortage of transportation services and poor road conditions

The health extension workers are expected to walk long distances in the district to reach to the houses of the woman to provide PNC services. This compounded with the way community settle in a much dispersed area made it very hard for them to provide home based PNC services. In addition, the high cost of motorbikes transportation services also made it impossible to use them frequently to provide the required services. The unpaved roads in the village was also found to be in poor condition where it was impossible to drive

on during rainy seasons. A study conducted in Indonesia to assess the factors associated with ANC and PNC service use found out that poor road conditions, distance of the health facilities from the village and shortage of transportation services made it impossible for the women to utilise PNC services (Christiana et al 2010:9).

6.6.1.5 Difficulties of moving in the village during rainy season

The interviewed health extension workers and health care workers mentioned the difficulties of provision of house-to-house PNC services especially during rainy seasons where the rivers are flooded and the fields are muddy which makes walking for long distances to reach to the women very challenging. It is less likely that a woman who gave birth during rainy season gets home-based PNC services. These difficulties of walking long distances in the village to provide maternal health services by the health extension workers were also reported by other study conducted to assess the role of health extension workers in linking the women with the health facilities for maternal health services (Jackson & Hailemariam 2016:474).

6.6.2 EARLY DISCHARGE FOLLOWING DELIVERY

The WHO guideline on PNC recommended that all mothers giving birth in the health facilities should not be discharged before 24 hours for the purpose of closely following up theirs and their newborn health conditions and manage any complications that may arise following delivery immediately. In addition, for all home deliveries, the first visit should be taken place in the first 24 hours, the second visit should on the third day and the third visit should be before the end of the first week of life (WHO 2017). In contrary to this the majority of the interviewed women were discharged early from the health facilities following delivery. The reasons mentioned for this are described below:

6.6.2.1 Family members need early discharge

This study has identified that one of the reasons for early discharge was actually owing to demand of the family members and the husbands who accompany the women during the delivery in the health facility. Once the women get delivered, the family members insist that they should take the women to home immediately. This finding is in congruent with a study conducted in India on the determinants of early discharge from the hospital following delivery showing the family members were one of the factors demanding early discharge from the facility (Nipte, Dhayarkar, Pawar, et al. 2015: s31).

6.6.2.2 Seek early discharge to take care of children at home

The study identified that some of the reasons mentioned by the participants for them to get discharged early once they delivered was to look after the rest of the children in the house and do their daily chores at home. A study conducted in India to assess the factors associated with early discharge of women form the health facilities showed that lack of strong advice by the health care providers was associated with early discharge from the health facilities (Nipte et al 2015: s28).

6.6.2.3 Unclean facility environment

Most of the interviewed women expressed their dissatisfaction about the cleanness of the health centres whenever they go there for delivery services. The beds they were sleeping were reportedly dirty; the bed sheets and the blankets were also reportedly not clean. This unclean environment was not found to be appealing for the women to stay there after the giving birth. These findings are supported by a study conducted in Eritrea to assess the predictors of women's satisfaction with hospital based delivery services found that unclean delivery room was one of the factor contributing to poor satisfaction of the wom en (Kifle, Ghirmai, Berhe, et al. 2017:6).

6.6.3 INADEQUATE IEC ACTIVITIES ON PNC

6.6.3.1 Low media coverage about PNC services

A study conducted in Zimbabwe to assess the factors associated with PNC service utilisation found out that mothers who have been exposed to mass media PNC information were more likely to utilise PNC services. This study has recommended dissemination of PNC information to larger audiences using mass media (Bwalya, Mulenga & Mulenga 2017:11). Another study conducted in Ethiopia to assess the prevalence and determinants of complete PNC services showed that only 18.4% of the women had information about PNC services of which only 20.2% of them got the information from mass media (Akibu, Tsegaye, Megersa & Nurgi 2018:5). This study has also identified that the interviewed women were not exposed to mass media and had never heard of PNC from the mass media. It was only skilled birth attendances and other health services had wide mass media coverages.

6.6.3.2 Inadequate morning health education session at facility level

This study indicated that the inadequacy of mass health education activities at the health centre level was one of the factors contributing to poor utilisation of PNC services. This morning health education used to be conducted in the previous years but now it has been abandoned. The health centres were only distributing IEC materials which were developed at higher levels.

A study conducted in Ethiopia to assess the integration of preventive, promotive ad curative health services in the hospitals and health centres of Addis Ababa reported that the preventive and promotive health services were almost absent. The health care workers mainly engaged on providing curative health services. Some of the factors mentioned for this were shortage of manpower and shortage of educational materials (Wendimagegn & Bezuidenhout 2018:248).

6.6.3.3 Lack of awareness raising materials and PNC checklist to be used by the HEW

This study found out that there was shortage of IEC materials pertaining to PNC and also lack of checklists to be used by the health extension workers which will improve the house-to-house PNC delivery services. The health extension workers relied on their memory to provide the PNC services at household level. The participants reiterated the importance of having a checklist that would remind them and facilitate the delivery of services the women and the newborn.

A study conducted in Ethiopia by Birhanu, Godesso, Jira and Morankar (2011:79) to assess the production and distribution of IEC materials in Ethiopia reported that only 68% of the health care workers had ever distributing IEC materials to the clients and also found shortage of storage place for IEC materials, lack of annual inventory on IEC materials and chronic lack of IEC materials in the health facilities.

The WHO has developed a comprehensive checklist to improve the service delivery during child birth and for the provision of PNC services for the women and the newborn following childbirth (WHO 2015a:89). Studies conducted to assess the impact of using the child birth checklist showed that the use of them has improved the service delivery practices through making sure that a complete and required services are delivered to the clients and help the health care workers not to forget services that has to be delivered to the specific client (Katherine, Semrau, Hirschhor, et al.2017:2323). However, this checklist has not been used in the study area.

6.6.3.4 Lack of information about the availability of checklist by the health care workers

The Federal Ministry of Health has developed checklists, patients' cards aiming at improving the data collection, organisation, analysis and use of data for local decision making. One of the cards developed pertaining to maternal health services was the

integrated antenatal, labour, delivery, newborn and postnatal card which was developed to be used at the hospital and health centre level to record services delivered to the women during ANC, delivery and postnatal period (FMOH 2013a:49). This card contains a list of services to be provided to the women and the newborn during PNC period. However, this study found out that the PNC component of this card have not been used by the health care workers and some of them even did not know the existence of it. This may indicate of the poor utilisation of PNC services as well as the inadequacy of attention given to PNC service provision.

6.6.4 PNC DATA MANAGEMENT

6.6.4.1 Difficulty to calculate expected date of deliveries

This study has identified that for the majority of the women it was very difficult to know their last date of menstruation which made it impossible for the health extension workers to calculate the expected date of delivery thereby plan the PNC services to be provided for the women and the newborn. Sometimes the health extension workers tried to help the women to remember the last date of menses by mentioning significant public holidays. However, most of the time this way of estimating the date of delivery was not effective. This lack of information made it difficult to reach to the women on the post-natal period and provide PNC services.

For one thing the women reported that they had difficulties in remembering the exact date of last menstrual period. For the other thing, delivering two weeks before or after the estimated date of delivery is also considered normal (Edwards & Itzhak 2019). Given this case, it may be a bit difficult to rely on the calculation of the expected date of delivery unless otherwise it is coupled with a feasible communication system between the expectant mother and the health extension workers to get information about the delivery status.

6.6.4.2 Lack of computerised pregnant women registration system

This study found out that there was an effort from the health extension workers to identify and register pregnant women as early as possible. They have also collaborated with kebele leaders and PLA facilitator in the identification of pregnant women. However, this way of registering pregnant women by going house-to-house was found to be difficult owing to logistical problems and doing it manually and organising the data was also found to be cumbersome. Owing to this problem, the health extension workers rely on the information obtained from neighbours or kebele leaders during meetings to know the pregnancy status of the women.

The study identified that health extension workers got information about the delivery status of the women from neighbours, facilitators or during meetings. There was no organised way of data collection and communication system to know who delivered when. This has posed challenges for the health extension workers to provide PNC services in the recommended PNC schedule. Countries like India which started early identification and registration pregnant women found out that early identification, registration and follow-up of pregnant women has facilitated the provision of subsequent services as well as decreased neonatal outcomes (Sable & Solanki 2017:21).

6.6.5 INADEQUATE KNOWLEDGE

6.6.5.1 Lack of knowledge and skills in treating sick newborn

For treating sick children under five years at community level, Ethiopia has scaled up the integrated community case management (ICCM) in 2010. This ICCM has targeted the major cause of morbidity and mortality in under five children such as diarrhoea, pneumonia, malaria, and malnutrition. The health extension workers deployed at the kebele level are supposed to use the ICCM manual to classify patients based on their sign and symptoms and manage the patient at the community level or give first dose of

medication and refer the patient to the nearby health facilities. Before starting the ICCM programme, the health extension workers have received six days training on it.

However, this study found out that the majority of the interviewed rural health extension workers expressed the difficulty of using the ICCM manual to treat children under five years. They reported that it was very challenging to classify the disease condition of these children specially newborns and provide medications accordingly. Concurrently a study conducted in Ethiopia to assess the implementation status of the national ICCM programme identified that the utilisation of the manual to treat under five children using the ICCM manual was sub optimal especially the treatment of 0-2 month old newborns were not implemented properly. Another recent study conducted by Hailemariam, Gebeyehu, Loha, et al. (2019:6) in Southern Ethiopia to assess the management of Pneumonia using the ICCM manual indicated that the HEWs were not properly managing the case owing to shortage medication and supplies and also reported lack of proper knowledge on the management of pneumonia using the ICCM manual.

6.6.5.2 Needs of training on PNC by the health care workers

This study found out that the health extension workers gave mixed responses regarding the needs of specific training on PNC that will help improve the service utilisation. The majority of them said they had already been trained while they were in the college and also received refresher training on maternal health which contained PNC as one component. Some of the interviewed health care workers also mentioned that the priority was not to give training on PNC care it was to make the health extension workers practice what they have already taught.

A study conducted in Ethiopia by Mohammed, Tilahun, Kote, Mama and Tamiru (2015:4) to validate the motivational factor for health extension workers found that giving training was not among the motivation factor rather it was the opportunity to pursue their education, existence of motivational supervisors, and availability of basic infrastructures were identified as a motivational factor for health extension workers. A study conducted

in Kenya to assess the motivational factors for community health workers also sound that being recognised by the community for their contribution on health services was one of the motivation factor (Winn, Lesser, Menya, et al. 2019:5).

6.6.5.3 Effects of sending health extension workers for further education on PNC service delivery

This study identified that some of the health extension workers were not found on their duty station because they had left for further education. It was also noted that before they left the working place, they had not properly handed over the tasks which they have been doing including giving information on the pregnancy status of the women who they have been following.

6.6.6 WEAK COMMUNITY STRUCTURE

6.6.6.1 Weak health development army structure

The health development army structure which is a 1 to 5 groups of households in which one of the household head serves as a leader of the group was introduced in Ethiopia in 2011 with the primary purpose of ensuring the presence of strong network in the community serving as a bridge between the community and the government health system and local political leadership in the community. The HDA leaders are not paid and are supposed to conduct awareness raising activities and support the health extension workers activities in the community on voluntary basis.

In different studies conducted to assess the contributions of WDA towards improvement in MNCH services showed positive results. One of the studies on health development army found out that they were effective in creating awareness on the importance of utilisation of MNCH services also increased utilisation of maternal health services availa ble in the facilities (Yitbarek, Abraham & Morankar 2019:4). Another study conducted to assess the correlation between women development army availability and the utilisation

of MNCH services indicated that in areas where there were a strong presence of women development army there was an improved utilisation of MNCH services (Damtew, Karim, Chekagn, et al. 2018:10).

Despite the contribution of the health development army towards improvement of the maternal health services in the country, the current study found out that that this structure has started to collapse in the area because the community associated this structure as political structure to control and oppress the community. A study conducted in Northern Ethiopia to assess the conditions of the WDA leaders found out that the leaders were found to be in poor conditions in terms of health and economic status and were burdened with many household activities and priorities given by the government (Maes, Closser, Tesfaye, Gilbert & Abesha 2018:4).

6.6.6.2 Unsustainable NGO supported pregnant women conferences

This study showed that the pregnant women conference described under 6.3.3.2 were not being held on regular basis in some of the kebeles. The reasons mentioned for this was owing to discontinuation of support provided by development partners which used to provide logistic support for the implementation of the pregnant women conferences.

Such kinds of unsustainability of NGO supported community interventions were reported in several studies. For instance, a study conducted to assess sustainability of donor funded programs recommended a careful preparation of transition phase to make sure that NGO led interventions are sustained in the community (Bennett, Singh, Ozawa, Tran & Kang 2011:8). A systemic review conducted in sub-Sharan African countries also indicated the sustainability of NGO supported interventions as a major challenge and recommended ownership of the community and involvement of all stakeholders in the process of the project intervention, and making sure that adequate local resources are allocated by the stakeholders to be used once the project is completed (Iwelunmor, Blackstone, Veira, et al. 2016:17).

6.7 CONCLUSION

In general, the results of the study identified the major factors affecting the quality and utilisation of PNC services in Ethiopia. Most of the views and experiences of health care workers were also identified by different study conducted in the country and abroad. This exploration and description of the views and experiences of women and health care workers on PNC services brought wide range of issues such as knowledge of the women, attitude of the women about PNC services, and factors associated with PNC service utilisation which were related with culture and traditions. The study also identified health facility and health care workers related factors affecting the utilisation and quality of PNC services. This study has of a particular use to incorporate the views and experiences of women and health care workers on policies and strategies to be developed.

CHAPTER 7

GUIDELINES TO IMPROVE THE UTILISATION AND QUALITY OF POST NATAL CARE SERVICES

7.1 INTRODUCTION

In the past decades Ethiopia has strived to improve the maternal, newborn and childcare health services through designing and implementing various health programs and strategies. These efforts has resulted in the improvement of prenatal and delivery services. However, the utilisation of PNC services have not shown improvement as expected. The aim of this thesis was to develop guidelines that will contribute towards improvement of utilisation and quality of PNC services provided in the country. The objectives were:

- To explore and describe the women's views and experiences on utilisation of PNC service;
- To explore and describe health care workers views and experiences on provision of PNC services;
- To assess the factors facilitating or hindering to the of PNC services; and
- To develop guidelines that would contribute towards increasing the utilisation and improve quality of PNC services.

The findings on the experiences and views of women and health care workers were presented in Chapter 5. Chapter 6 discussed the findings of the study against relevant literatures. The guidelines were informed by the findings of the current study, relevant aspects of reviewed literature, the theoretical framework of the study and the researcher's insights. The adapted health belief model was used to categorise the findings of the study.

These guidelines are developed to contribute for the improvements of PNC services delivered in the facilities and at household levels. It is designed to inform policies, strategies and operating procedures that are found in the country.

7.2 PROCESS OF GUIDELINE DEVELOPMENT

The idea of developing these guidelines came out for the purpose of improving the utilisation and quality of PNC services in Ethiopia. The guidelines took into consideration the findings of the research described in Chapter 5, the discussion of the findings on chapter 6, and the extensive literature review made on the emerged themes, categories and subcategories. The draft guidelines developed were shared with experts working on MNCH services at district, zonal and regional levels. Consultation was held with the key informants for their reviews and feedbacks. Health care workers providing PNC services also gave feedbacks on the guidelines developed. Finally, the guidelines were shared with public health experts to check for their comprehensiveness, their feasibility and applicability. The process followed to develop these guidelines is depicted in Fig. 7.1

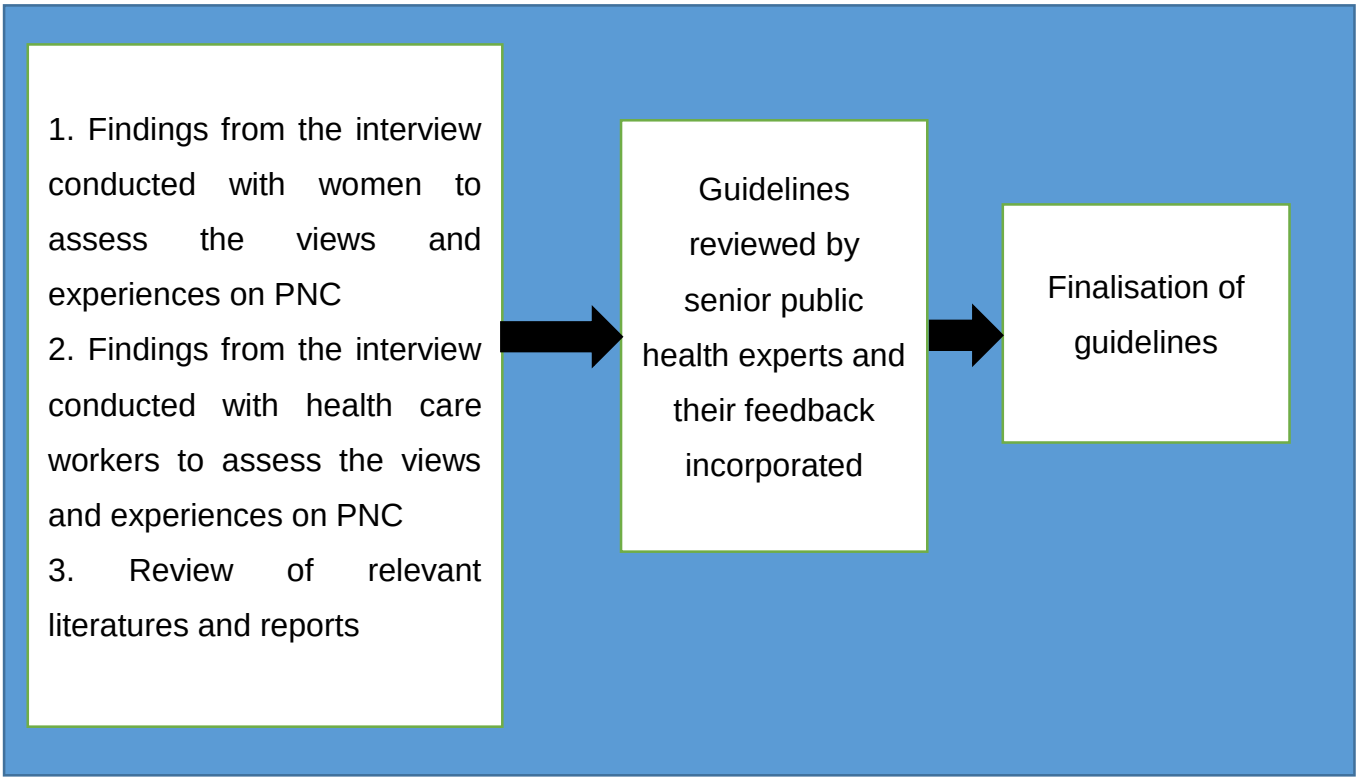


Figure 7.1: Process of guidelines development

7.3 SCOPE OF THE GUIDELINES

These guidelines are to be used as an indication to improve utilisation and quality of PNC services provided at facility and home based levels. They were designed to be used as an input for policy makers, health services planners and health care workers to properly plan and implement PNC services in the community. Hence, the guidelines can be utilised by policy makers, health service managers, and health service providers at different levels of the health system.

7.4 PURPOSE OF THE GUIDELINES

The purpose of this guideline is to provide evidence-based guidance to policy makers, health care managers, and health care workers improve the utilisation and quality of PNC services provided at the facility and home based levels. It is envisaged that the use of these guidelines will help to better plan, implement and monitor PNC services.

7.5 OBJECTIVES OF THE GUIDELINES

The objective of this guideline is to describe the recommended guidance and strategies aiming at improving the utilisation and quality PNC services provided at health facility and home-based levels.

7.6 GUIDELINES TO IMPROVE PNC UTILISATION AND QUALITY OF SERVICES

This section presents guidelines aiming at improving utilisation and quality of PNC services. The guidelines are developed to provide recommendations addressing the themes, categories and sub-categories identified by the study.

7.7 GUIDELINES

7.7.1 PRIORITISE PNC DURING PERFORMANCE REVIEW MEETINGS

Performance review meetings are meant to improve the performances of the health services on key performance indicators, identify challenges, problems, seek solutions for the identified problems, and develop action plans that will be implemented after the review meeting is completed. Performance review meetings should focus health services that are lagging behind or need special emphasis.

Some of the strategies to prioritise PNC service during performance review meetings are as follows:

- Communicate the review meeting agendas ahead of time;
- Make all health facilities present their PNC performances;
- Make the PNC indicators one of the staff appraisal indicator;
- Discuss on how they reach on the figures and reach on consensus on how to measure PNC services;
- Discuss on the problems and challenges regarding PNC services;
- Present best experiences among the meeting participants or best practices from other areas;
- Set targets that can be evaluated during the next review meeting; and
- Develop action plan indicating who, where, when will do the activities including the resources required and their sources.

7.7.2 COUNSELLING SERVICES DURING ANC AND FOLLOWING DELIVERY

This study found out that the counselling services provided to the women during pregnancy and post delivery services need improvement. The counselling services provided to the women during ANC and PNC should include information about institutional delivery, the importance of receiving PNC services, the post-natal danger signs, and the care needed to the women and newborn. Moreover, health care workers need to effectively communicate with the women, the birth attendants, and the family members on issues pertaining to care for the mother and the newborn.

The following guidelines are proposed to improve the overall counselling services provided to the women during antenatal and post-natal periods:

- Encourage the women to make immediate visits to the health facilities when their regular menses is delayed or stopped;
- In all visits of the women, inform them about the danger signs that may occur during anti natal period, about delivery complications and post-delivery danger that may occur on herself and the newborn;
- When the health extension workers leave their duty station due to different reasons, the women should be introduced to the other health extension workers who would replace her;
- Offer capacity building training to health care workers to provide comprehensive counselling services to the women on discharge;
- Develop and use PNC checklist that can be used as a reminder on what kinds of information should be communicated to the women on discharge;
- Provide comprehensive information to the women on discharge: the importance of the subsequent PNC visits; danger signs on the newborn and herself; care needed for the newborn and herself; exclusive breastfeeding practices; immunisation schedules ; and
- Ask the women about her concerns and respond appropriately.

7.7.3 STRENGTHEN THE HEALTH EXTENSION PROGRAMME

This study found out that most of the health extension workers do not reside in the kebele where they are assigned to. They live in a town which is very far from the health posts. Using transportation services to come to the health posts on daily basis is also very expensive. In addition, there were no residential compounds in the health posts for the health extension workers to live in. This study found out also there were no system of monitoring the day-to-day activities of the health extension workers and there were no system of conforming the home visits reportedly made by the health extension workers.

Based on this finding, the following guidelines are proposed:

- Recruit health extension workers from the same kebele where the health posts are located and make sure that the recruited health extension workers are less likely to change the duty station in short terms;
- Construct health posts with the residential compound fulfilling the minimum standards;
- Work with the local community to provide more assistance to the health extension workers to remain in their duty station for longer period;
- Establish a day to day health extension workers activity monitoring system to make sure that they do what they are supposed to do;
- Develop a home visit confirmation checklist at household level;
- Make a random check to each of the households to make sure that the health extension workers conduct house to house visit;
- Reconsider the professional name given to the Level 4 health extension workers to conform that it is a professional growth and also motivate the other health extension workers to aspire for it;
- Renovate and rehabilitate the existing health posts including rehabilitation the building infrastructure, the supply of water and electricity, making essential equipment, supplies and drugs available in the health posts; and
- Assign adequate number of health extension workers.

7.7.4 STRENGTHEN THE COMMUNITY LEVEL INTERVENTIONS

This study found out that the health development army structure was found to be very weak and need to be revitalised. There was also a new community mobilisation and community capacity building intervention called Participatory Learning and Action being conducted in the community which was reportedly very effective in terms of awareness raising and MNCH services demand creation**.** In addition, pregnant women conferences were not effectively conducted.

The following guidelines are proposed to improve the community level interventions:

- Revitalise the health development army structure by conducting community meetings to make sure that the intention of this structure is clearly understood by the community;
- Involve religious and community leaders in the revitalisation process of the health development army structure;
- Conduct regular supportive supervisions and meetings to strengthen the communication between the health development army leaders and the local government authorities;
- Make sure that the PLA approach is sustained in the project area by integrating the PLA facilitators with the existing HDA structures;
- Keep conducting pregnant women conference by making the conferences in areas closer to the residential places of the women; and
- Work with development partners to make sure that the pregnant women conferences are effectively implemented in the project area.

7.7.5 IMPROVE COMMUNICATION AND LINKAGE BETWEEN THE HEALTH CENTRES AND HEALTH POSTS

One of the findings of this study is the poor linkage and communication between health centres and health posts. The women who delivered in the health centres were discharged without being linked to the health posts for the subsequent PNC visits. In addition, the health extension workers did not receive information from the health centres on who has delivered from their catchment area. The women went to her home post-delivery without having a plan on how to make the subsequent visits. In addition, the supportive supervisions being conducted to health the post were infrequent owing to the shortage of work force and transportation facilities. Fostering a strong partnership and linkage between the health centres and health posts is recommended in the health sector transformation plan of the country. Having a strong linkage between health centres and health posts are recommended to sustain the performances of the health extension

program in the country (FMOH 2015b:22). The following guidelines are made to make the linkage between health centres and health posts stronger:

- Make a regular supportive supervisions to the health posts and ensure the problems and challenges of health extension workers are addressed;
- Establish a telephone communication means between the health centres and health posts to exchange information about post-natal woman's status and the kind of care the women should receive at home level;
- Conduct at least a quarterly review meeting between the health centres and the catchment area health posts;
- Establish a referral and feedback mechanism between the health centres and health posts to improve the PNC services delivered at the facility level; and
- Encourage the community to keep up the supportive role they play for women during the post-natal period.

7.7.6 CONDUCT MASSIVE AWARENESS RAISING INTERVENTIONS

There were lack of knowledge and awareness about the importance of PNC services for apparently healthy women and healthy newborn. PNC visits were only considered when the women or the newborn were sick. Even when the newborn is sick, the majority of the women resorted to traditional and cultural practices which may further complicate the health of the newborn or endanger his/her life. There were also traditional practices which can potentially affect the health of the newborn. Different studies conducted in developing countries suggested that conduction of awareness raising interventions improves the perception and knowledge of the women towards improving the utilisation of maternal health services as well as tackle socio-cultural practices and barriers affecting the health of the women and the newborn. Therefore, conducting behavioural change communication aiming at the traditional and cultural practices affecting the health of the women and the newborn, and improving the overall perception and knowledge on the importance of PNC services is mandatory. The following guidelines are proposed for the conduction of awareness raising interventions:

- Conduct community-based health education using the health extension workers and the PLA facilitators to improve the awareness and knowledge of the community towards PNC services;
- Start-up health facility-based morning health education targeting PNC services and utilise mass media to disseminate information related with PNC services;
- Utilise the available behavioural change communication tools to increase the knowledge and awareness of the community towards PNC services;
- Emphasise the importance of utilising PNC services in all of awareness raising activities;
- Develop and utilise health message targeting the cultural and traditional practices being conducted in the community;
- Develop and utilise health message by including the danger signs, importance of receiving PNC services, the care needed for the newborn and the women post-delivery, the effects of traditional practices on the health of the newborn and the women, the misconception about the need of confinement following delivery;
- Prepare and use IEC materials on PNC using the local language. The EPI card which contains message about danger signs shall be given to the women on discharge;
- Engage family members, neighbours, religious leaders, community leaders and significant others to improve the knowledge and perception about PNC services and to ask for their collaboration to let the women stay in the health facilities for at least 24 hours following delivery.

7.7.7 TRANSPORTATION FACILITIES

Ambulance transportation to the labouring mother and transportation facilities to health extension workers was found to be problematic. Although there were ambulance transportation services by the Woreda and Wolisso Hospital, the majority of the women did not have the phone number of the ambulances to make a call when they needed them. In addition, when ambulances are on maintenance services, there were no replacement.

The health care extension workers had also challenges to walk very long distances to reach to the women to provide PNC services owing to shortage of transportation services and high cost of using the available motorcycle transportation.

This finding is supported by a study conducted to assess ambulance use. The study was found out that ambulance service use is different in different woreda where in some of the woreda labouring women were getting Ambulance services even during night time and in some other woreda, it was not possible to accesses ambulance services for labouring women where they were advised to use public transport services (Jackson & Hailemariam 2016:474). The following guidelines are proposed to improve the ambulance transportation services:

- Make sure that all women get the phone number of the ambulance services by writing the number on their visit card;
- Create a mechanism of coordinating the use of all ambulances operating in the area;
- Make sure that a replacement vehicle is available when the Ambulance are on maintenance;
- Raise resources from the community to cover the cost of maintenance and fuel for the ambulances; and
- Arrange a transportation service for health extension workers to move around in the village to provide PNC services.

7.7.8 PNC DATA MANAGEMENT

It is evident from this study that the definition of PNC services and the way data are collected and interpreted at different levels are not consistent. One way of ensuring data quality is through ensuring the reliability of the data which is achieved when the data generated from the health system are based on standard procedures and protocols which will not vary at all levels of the health system and is always the same irrespective of who is using them and irrespective of the frequency of data collection period. Data are reliable

when they are measured and collected consistently (FMOH 2013b:9). For the purpose of improving the PNC related data, the following guidelines are set (FMOH 2013b:13):

- Establish an electronic-based pregnant women registration system;
- Offer training and provide continuous mentorship to make sure that the indicators are clear for all staffs and provide refresher training on recording and reporting of PNC;
- Conduct data quality assessment on regular basis;
- Conduct integrated supportive supervision to improve the PNC data recording and reporting; and
- Offer regular feedback on data quality and recording & reporting procedure to the lower levels.

7.7.9 HEALTH CARE WORKERS CAPACITY BUILDING

The availability of well trained and skilful health care workers has a paramount importance for the delivery of quality health services. Health care workers need to receive a regular refresher training to update their knowledge and skills thereby guaranteeing the provision of quality health services to the clients (Matovu, Wanyenze, Mawemuko, et al. 2013:2). It appears that PNC services were not given much attention at all levels of the health system and the services to be provided to the women and the newborn were recognised. Therefore, offering short-term training is imperative to revitalise the PNC service provision.

- All health care workers and health managers should receive short-term on job training on PNC services;
- Mentorship and supportive supervision should be conducted on PNC services to strengthen the PNC service provision;
- The importance of PNC services should be overemphasised during the undergraduate study program of health care workers;

- Make sure that health care worker understand that provision of PNC services is the responsibility of all health care workers;
- Make close follow up, supportive supervision to the health extension workers to make sure that ICCM is being implemented according to the plan;
- Establish a mentorship program to the health extension workers for an effective implementation the ICCM;
- Conduct post training evaluation to identify knowledge and skills gaps on ICCM; and
- Arrange a continuous capacity building program on ICCM.

7.7.10 IMPROVING HEALTH FACILITIES COMPOUND

The facility environment and the infrastructural conditions can affect the way the clients feel about the service to receive. Clean rooms and clean environment are one way of attracting the women to the health facilities for maternal health services and improve client satisfaction (Kifle et al 2017:3). This study found out that unclean beds, beds sheets, broken windows and lack of washing facilities in the health centres were some of the factors making the women not to stay in the health facilities after the delivery.

A study conducted by Lao found out that facility cleanliness is one of the factors contributing to continuum of maternal health services (Khammany, Yoshida, Sarker, et al. 2015:77). The following are provided as guidelines:

- Make water and washing facilities available in the health facilities at all times;
- Supply cleaning materials and detergents to the health facilities;
- Make sure that adequate number of cleaners are hired to the health centres;
- In the facilities where there are electric supplies start providing laundry services;
- Rehabilitate old building and maintain broken doors and windows;
- Ensure the allocation of adequate budget for cleaning services; and
- Mobilise the health care workforce to make cleaning health facilities are the responsibility of all health care workers.

7.7.11 EQUIPMENT AND SUPPLIES

The availability of medical equipment supplies and drugs for the provision of quality PNC services are important. For instance, the shortage of beds in the health centres, shortage of BP apparatus, thermometer, gloves and other supplies for the provision of home to home PNC services were identified in this study. In addition, there were lack of essential drugs and antibiotics. Making medical equipment and drugs available in the health facilities will enable the health care workers provide quality medical services as well as improve client satisfaction. The following are given as a guideline to improve the availability of medical equipment, supplies and drugs:

- Conduct inventory of medical equipment supplies and drugs;
- Supply beds, BP apparatus, thermometer, gloves and other supplies to the health centres and health posts;
- Supply essential drugs and antibiotics to the health facilities;
- Ensure stock of essential drugs, supplies and medicine are available in the health facilities;
    - Strengthen the medical equipment, supplies and drugs supply chain management;
    - Establish medical equipment maintenance unit at the district levels; and
    - Maintain medical equipment on regular basis.

7.7.12 HEALTH FACILITIES INFRASTRUCTURE

One of the essential components of delivering quality maternal health services is the availability of water, electricity, adequate rooms, and clean facility environment. In a study conducted by Essendi, Johnson, Madise, Matthews, Falkingham, Bahaj, James and Blunden (2015:9) poor health facility infrastructures were the contributing factors for low maternal health services coverage and also contributed to poor motivation of the health care workers. The health facilities water and electricity supply, cleanness of the compound and rooms for PNC services need to be improved in order to provide quality

health services. The following guidelines are proposed to improve the health infrastructural issues identified in this study:

- Renovate the existing health facilities or construct rooms dedicated for PNC services. This can be done by mobilising resources from development partners and the community;
- Work with the government counterparts to make sure that water and electric supplies are available in the health facilities consistently; and
- Establish health facilities infrastructure maintenance unit at dystric level.

7.7.13 COMPASSIONATE, RESPECTFUL AND CARING SERVICES

Provision of maternal health services in respectful manner has of paramount importance in the delivery of quality maternal health services. Providing care with respect, care and compassion improves client satisfaction and also encourages women to utilise the subsequent maternal health services. A study conducted by Amole, Tukur, Farouk and Ashimi (2019:24) showed that women who received delivery services with care and respect were more likely utilise PNC services. In this study, it was found out that some of the health care workers were not providing maternal health services in respectful and caring manner. The following guidelines are made to realise the provision of maternal health services in caring, respectful and with compassionate (FMOH 2018b:4):

- Foster ownership and engagement of the leadership at all levels of the system;
- Establish a national, regional and facility level CRC ambassadors;
- Conduct an advocacy campaign through mass media by engaging patients and the general public on the CRC movement;
- Conduct annual health professional recognition event;
- Put in place a favourable legislative framework to reinforce CRC which would include regulation on patients' rights and responsibilities (PRR);
- Measure health care providers on CRC;
- Provision of continuous CRC trainings;

- Listen to client’s feedback attentively;
- Respond to clients politely;
- Clarify for any misunderstandings; and
- Offer help whenever a client asks for support.

Table 7 1: Summary of intervention guidelines

Guidelines	Intervention
Prioritise PNC during performance review meetings	• Communicate the review meeting agendas ahead of time. • Make all health facilities present their PNC performances. • Make the PNC indicators one of the staff appraisal indicator. • Discuss on how they reach on the figures and reach on consensus on how to measure PNC services. • Discuss on the problems and challenges regarding PNC services. • Present best experiences among the meeting participants or best practices from other areas. • Set targets that can be evaluated during the next review meeting. • Develop action plan indicating who, where, when will do the activities including the resources required and their sources.
Counselling services during ANC and following delivery	• Encourage the women to make immediate visits to the health facilities when their regular menses is delayed or stopped. • In all visits of the women, inform them about the danger signs that may occur during anti natal period, about delivery complications and post-delivery danger that may occur on herself and the newborn. • When the health extension workers leave their duty station due to different reasons, the women should be introduced to the other health extension workers who would replace her.

Guidelines	Intervention
	• Offer capacity building training to health care workers to provide comprehensive counselling services to the women on discharge. • Develop and use PNC checklist that can be used as a reminder on what kinds of information should be communicated to the women on discharge. • Provide comprehensive information to the women on discharge: the importance of the subsequent PNC visits; danger signs on the newborn and herself; care needed for the newborn and herself; exclusive breastfeeding practices; immunisation schedules. • Ask the women about her concerns and respond appropriately.
Strengthen the health extension programme	• Recruit health extension workers from the same kebele where the health posts are located and make sure that the recruited health extension workers are less likely to change the duty station in short terms. • Construct health posts with the residential compound fulfilling the minimum standards. • Work with the local community to provide more assistance to the health extension workers to remain in their duty station for longer period. • Establish a day-to-day health extension workers activity monitoring system to make sure that they do what they are supposed to do. • Develop a home visit confirmation checklist at household level.

Guidelines	Intervention
	• Make a random check to each of the households to make sure that the health extension workers conduct house-to-house visit. • Reconsider the professional name given to the Level 4 health extension workers to conform that it is a professional growth and also motivate the other health extension workers to aspire for it. • Renovate and rehabilitate the existing health posts including rehabilitation the building infrastructure, the supply of water and electricity, making essential equipment, supplies and drugs available in the health posts • Assign adequate number of health extension workers.
Strengthen the community level interventions	• Revitalise the health development army structure by conducting community meetings to ensure that the intention of this structure is clearly understood by the community. • Involve religious and community leaders in the revitalisation process of the health development army structure. • Conduct regular supportive supervisions and meetings to strengthen the communication between the health development army leaders and the local government authorities. • Make sure that the PLA approach is sustained in the project area by integrating the PLA facilitators with the existing HDA structures.

Guidelines	Intervention
	• Keep conducting pregnant women conference by making the conferences in areas closer to the residential places of the women. • Work with development partners to ensure that the pregnant women conferences are effectively implemented in the project area. • Encourage the community to keep up the supportive role they play for women during the post-natal period.
Improve communication and linkage between the Health centres and health posts	• Make a regular supportive supervisions to the health posts and ensure the problems and challenges of health extension workers are addressed. • Establish a telephone communication means between the health centres and health posts to exchange information about post-natal woman's status and the kind of care the women should receive at home level. • Conduct at least a quarterly review meeting between the health centres and the catchment area health posts. • Establish a referral and feedback mechanism between the health centres and health posts to improve the PNC services delivered at the facility level.
Conduct massive awareness raising interventions	• Conduct community-based health education using the health extension workers, and the PLA facilitators to improve the awareness and knowledge of the community towards PNC services. • Start-up health facility based morning health education targeting PNC services and utilise mass media to disseminate information related with PNC services

Guidelines	Intervention
	• Utilise the available behavioural change communication tools to increase the knowledge and awareness of the community towards PNC services. • Emphasise the importance of utilising PNC services in all of awareness raising activities. • Develop and utilise health message targeting the cultural and traditional practices being conducted in the community. • Develop and utilise health message by including the danger signs, importance of receiving PNC services, the care needed for the newborn and the women post-delivery, the effects of traditional practices on the health of the newborn and the women, the misconception about the need of confinement following delivery. • Prepare and use IEC materials on PNC using the local language. The EPI card which contains message about danger signs shall be given to the women on discharge. • Engage family members, neighbours, religions leaders, community leaders and significant others to improve the knowledge and perceptions about PNC services and to ask for their collaboration to let the women stay in the health facilities for at least 24 hours following delivery.
Transportation facilities	• Ensure that all women get the phone number of ambulance services by writing the number on their visit card

Guidelines	Intervention
	• Create a mechanism of coordinating the use of all ambulances operating in the area • Ensure that a replacement vehicle is available when the ambulance are on maintenance. • Raise resources from the community to cover the cost of maintenance and fuel for the ambulances. • Arrange a transportation service for health extension workers to move around in the village to provide PNC services.
PNC data management	• Establish an electronic-based pregnant women registration system. • Offer training and provide continuous mentorship to make sure that the PNC indicator is clear for all staff and provide refresher training on recording and reporting of PNC. • Conduct data quality assessment on regular basis. • Conduct integrated supportive supervision to improve the PNC data recording and reporting. • Offer regular feedback on data quality and recording and reporting procedure to the lower levels.
Health care workers capacity building	• All health care workers and health managers should receive short term on job training on PNC services.

Guidelines	Intervention
	• Mentorship and supportive supervision should be conducted on PNC services to strengthen the PNC service provision. • The importance of PNC services should be overemphasised during the undergraduate study program of health care workers. • Ensure that health care worker understand that provision of PNC services is the responsibility of all health care workers. • Make close follow-up, supportive supervision to the health extension workers to make sure that ICCM is being implemented according to the plan. • Establish a mentorship programme to the health extension workers for an effective implementation the ICCM. • Conduct post training evaluation to identify knowledge and skills gaps on ICCM. • Arrange a continuous capacity building program on ICCM.
Improving health facilities compound	• Make water and washing facilities available in the health facilities at all times. • Supply cleaning materials and detergents to the health facilities. • Ensure that adequate number of cleaners are hired to the health centres. • In the facilities where there are electric supplies start providing laundry services • Rehabilitate old building and maintain broken doors and windows. • Ensure the allocation of adequate budget for cleaning services.

Guidelines	Intervention
	• Mobilise the health care workforce to make cleaning health facilities are the responsibility of all health care workers.
Equipment and supplies	• Conduct inventory of medical equipment supplies and drugs; • Supply beds, BP apparatus, thermometer, gloves and other supplies to the health centres and health posts; • Supply essential drugs and antibiotics to the health facilities; • Ensure availability of stock of essential drugs, supplies and medicine at the health facilities; • Strengthen the medical equipment, supplies and drugs supply chain management; • Establish medical equipment maintenance unit at the district levels; and • Maintain medical equipment on regular basis.
Health facilities infrastructure	• Renovate the existing health facilities or construct extra rooms dedicated for PNC services. This can be done by mobilising resources from development partners and the community. • Work with the government counterparts to ensure that water and electric supplies are available in the health facilities consistently. • Establish health facilities infrastructure maintenance unit at dystric level.

Guidelines	Intervention
Compassionate, respectful and caring services	• Foster ownership and engagement of the leadership at all levels of the system. • Establish a national, regional and facility level CRC ambassadors. • Conduct an advocacy campaign through mass media by engaging patients and the general public on the UNCRC movement. • Conduct annual health professional recognition event. • Put in place a favourable legislative framework to reinforce CRC which would include regulation on patients' rights and responsibilities (PRR). • Measure health care providers on UNCRC. • Provision of continuous UNCRC trainings. • Listen to clients' feedback attentively. • Respond to clients politely. • Clarify for any misunderstandings. • Offer help whenever a client asks for support.

7.8 CONCLUSION

This chapter presented the guidelines aiming at improving the utilisation and quality of PNC services provided at the facility and at home level. The guidelines were reviewed by senior public health experts. The guidelines considered the findings of the study and also took inputs from literatures conducted on maternal health issues. The guidelines covered wide range of factors affecting the quality and utilisation of PNC services and can be used as an input for policy makers and health service managers in the efforts of improving PNC services delivered in the country.

CHAPTER 8

CONCLUSION AND RECOMMENDATIONS OF THE STUDY

8.1 INTRODUCTION

The purpose of this thesis was to assess the views and experiences of women and health care workers for the purpose of developing guidelines that would improve the utilisation and quality of PNC services. The study collected data from the women who gave birth recently and from health care workers delivering and coordinating PNC services in the area. The analysis utilised inductive thematic analysis to generate codes, categories and themes. Chapter 5 and 6 presented the findings and the discussion of the study while Chapter 7 depicted the guidelines developed aiming at improving the utilisation and quality of PNC services. This chapter presented the conclusion, the limitation and the recommendation of the study.

8.2 CONCLUSION

This study was conducted to assess the views and experiences of women and health care workers on PNC services for the purpose of developing guidelines aiming at improving the PNC services. This study identified valuable results that can be used as inputs by health policy makers and health service managers in the efforts of improving PNC services provided at health facility and home levels.

In general, the PNC service utilisation was found to be very low. Shortage of transportation facilities, existence of traditional/cultural beliefs associated with post-natal period, lack of understanding about the importance of PNC services and facility-related problem were identified as contributing factors for low utilisation of PNC services.

More importantly, the health care workers providing PNC services need to be strengthened. Adequate number of health care workers including midwives and health extension workers should be assigned in areas where the catchment population is wide. The health extension workers' professional carriers and naming of the upgraded carriers should be reconsidered to make it more acceptable to the health extension workers.

The health extension workers lacked skills to implement ICCM and need to be capacitated. The health care workers working in the health facilities need to be oriented on the importance of PNC. In addition, the health extension workers need to be closely monitored and supervised.

This study found out that women who delivered in the health facilities were not receiving quality PNC services. Moreover, the counselling services provided to the women on discharge were not comprehensive and included only few messages about immunisation and family planning services and was not supported by a counselling checklist. Medical equipment supplies and essential drugs necessary for the delivery of PNC services were missing or inconsistently supplied throughout the year. There were shortage of rooms for PNC services, lack of water and lack of electric supplies were also reported. The recommended 24 hours length of stay following delivery were not respected owing to shortage of beds, rooms, absence of washing facilities, and unclean facility environment. In addition, urgency to go home by the close family members and the need to take care for other children at home has also contributed to early discharge from the facilities.

This study found out that PNC services were given less attention by the health care workers as well health service managers. The PNC indicator definition and the way the data were reported to higher levels were not consistent from facility-to-facilities. There was a general consensus among the health care workers that the subsequent PNC services were supposed to be provided by the health extension workers at home level. However, this home visits by the health care workers were not conducted properly owing to lack of accurate information on who has got delivered and when in the catchment areas of the health posts. There was also poor linkage and communication between the health centres and the health posts towards exchanging information about the status of pregnant women. Even if the health extension workers knew who has got delivered, making post-natal visits on the recommended visit schedule were difficult owing to lack of transportation means and poor road facilities.

The conclusion from the interviews conducted with women indicated that there was a need of massive behavioural change and communication to improve the awareness and knowledge of the women towards PNC services. Generally, postnatal visits were considered only for immunisation of the newborn or to use family planning services. The morning health education should be strengthened and utilised to disseminate PNC-

related message; IEC on post-delivery danger signs shall be prepared in local languages and be given to the women on discharge; mass media should be utilised to disseminate PNC health messages; family members and neighbours of pregnant women should be also targeted in the dissemination of health message on PNC; the pregnant women conference should be strengthened and be organised closer to the place where the pregnant women reside; the health communication should target the harmful traditional practices being conducted in the community such as Uvulectomy, the application of butter on the body of the newborn and confinement of the women during the postnatal period.

8.3 RECOMMENDATIONS

The following recommendations are made based on the study findings:

8.3.1 RECOMMENDATIONS DIRECTED TO FEDERAL MINISTRY OF HEALTH

Health extension programme

- Review the carrier structure of the health extension workers and make adjustments incorporating the needs and aspirations of the workers;
- Renovate health posts to ensure that water and electricity are available to them;
- Upgrade the health posts to provide comprehensive health services so that women would not go the health centres for PNC services; and
- Strengthen the medical equipment, supplies and drugs supply chain management.

Staffing

- This study found out that midwives and health extension workers were not adequately available in the health facilities. An assessment to identify the real gaps of health care workers should be conducted and gaps should be filled urgently. In addition, health care workers codes of conduct should be prepared and used in the health facilities.
- Follow-up and strengthen the compassionate, respectful and caring way of delivering health services to the community.

The PNC services delivery

- Enforce laws and regulations to make sure that women stay in the health facilities for at least 24 hours following delivery.
- Ensure that the definition of PNC services is clear to all of the health care workers.
- Establish a system of introducing the maternal health service-related cards, forms and registration system to the newly hired health care workers.
- Start up an electronic way of pregnant women registration and follow up systems.
- Allocate adequate number of ambulance services to the community.
- Prepare and use PNC service delivery guidelines.
- Make available IEC materials and teaching aids to the health care workers and health extension workers.
- Strengthen the community level structures such as HDAs and the PLA approach.
- Develop and PNC counselling manuals and guidelines.

8.3.2 RECOMMENDATION DIRECTED TO THE REGIONAL HEALTH BUREAU/ZONAL HEALTH OFFICE/ WOREDA HEALTH OFFICE

- Follow-up the day-to-day activities of health extension workers and other health care workers to make sure that PNC services are delivered on time.
- Make essential equipment, drugs and supplies necessary for the delivery of facility based and home based PNC services available.
- Strengthen the linkage between health centres and health posts to make sure that pregnant women receive comprehensive support.
- Provide support to the Ambulance transportation services and raise resources from the community to cover the fuel and maintenance costs of the ambulances.
- Rehabilitate the existing health posts and health centres.
- Provide regular supportive supervisions to the health posts..
- Strengthen the community level structures such as HDAs and the PLA approach.
- Ensure that morning health education including education on PNC services are delivered at the health facility level.
- Ensure that the equipment, drugs and supply chain management are functional in the area.
- Make PNC services as a programme review agenda whenever review meetings are organised.

8.3.3 RECOMMENDATIONS TO THE HEALTH FACILITIES

- Organise a facility environment cleaning campaigns and regular cleaning of the health facilities a culture.
- Keep up the traditional coffee ceremonies being organised for women who gave birth in the health facility.
- Give orientation to the health care workers on HMIS registers, cards, and forms related with maternal health services.
- Provide the EPI card which contains information about danger signs on discharge.
- Ensure that women on discharge received comprehensive counselling services.
- Make PNC services as a programme review agenda whenever review meetings are organised.

8.3.4 RECOMMENDATIONS FOR HEALTH MESSAGE COMMUNICATORS

To improve the knowledge and awareness of women on PNC services, the following recommendations are made:

- Develop IEC materials on PNC services using local languages emphasising the importance of PNC services, danger signs during pregnancy and post-delivery, the effects of harmful traditional practices, the care needed for the newborn and the mother following delivery.
- Develop and disseminate health messages on PNC using mass media.
- Ensure that morning health education are offered in the health facilities

8.3.5 IMPLEMENTATION OF THE PROPOSED GUIDELINES

This study was conducted with an ultimate aim of developing guidelines that would improve the quality and utilisation of PNC services. The guidelines developed in this study were developed based on the findings of the study and consulted relevant literatures and documents reviewed. Public health experts have also reviewed and approved the guidelines. To improve the PNC service quality and utilisation, the recommendations made under this document need to be implemented.

8.4 FURTHER RESEARCH

This study has assessed the views and experience of health care workers and women on PNC services in very limited areas. Broader studies to assess the view and experiences of women on PNC services in other geographic area would be important. Other studies can also include observational study to assess the actual interaction between the service providers and the women. Motivating and demotivating factors of health care workers working in the health centres need to be studied. The health care workers approach and conduct in delivering health services need to be investigated. In addition, how the health extension workers spend their working hours on daily basis need to be studied. It is also good for other studies measure the effects implementing the recommendations made under this study on PNC services.

8.5 CONTRIBUTION OF THE STUDY

This study was conducted to assess the views and experience of women and health care workers on PNC services. PNC service is one of the health services poorly utilised and given less attention by the health care workers. There are no much studies conducted on PNC services assessing the views and experiences of health care workers and women on PNC services. This is a first study in Ethiopia to assess the views and experiences of women and health care workers on PNC services. The study has provided a rich description of the views and experiences of health care workers and women on PNC services. The guidelines produced in this study are also first of their kind and potentially can improve the quality and utilisation of PNC services.

8.6 LIMITATIONS

The following are limitations of the study:

- This study was conducted in two districts of South West Shoa Zone of Oromia region. This may limit the generalisability of the findings to other areas. However, the codes, categories and themes emerged from this study are also supported by other studies conducted in the country and this will endure the transferability of the study findings to other similar settings.

- The study employed a qualitative study design and involved women and health care workers on voluntary basis. The views and experiences of women and health care workers who did not participate in this study may be different.
- The study did not include observation as data collection method to see the client and health care workers interaction. However, the interviewed women and health care workers gave detail description of their views and experiences on PNC services.

8.7 CONCULSION

This chapter presented the conclusion of the study, the recommendations made to Federal Ministry of Health, and the different levels of the health systems. Future recommended study area, the contribution and the limitation of the study were also presented.

LIST OF REFERENCES

Abebo, TA & Tesfaye, DJ. 2018. Postnatal care utilisation and associated factors among women of reproductive age Group in Halaba Kulito Town, Southern Ethiopia. *Archives of Public Health* 76(9):1-10.

AbouZahr, C & Boerma, T. 2005. Health information systems: the foundations of public health. *Policy and Practice* 83:578-583.

Ademe, BW, Tebeje, B & Molla, A. 2016. Availability and utilisation of medical devices in Jimma zone hospitals, Southwest Ethiopia: a case study. *BMC Health Service Research* 16(287): 1-10.

Adoga, AA & Nimkur, TL. 2011. The Traditionally Amputated Uvula amongst Nigerians: Still an Ongoing Practice. *International Scholarly Research Network* 2011:1-4.

Akibu, M, Tsegaye, W, Megersa, T & Nurgi, S. 2018. Prevalence and Determinants of Complete Postnatal Care Service Utilisation in Northern Shoa, Ethiopia. *Journal of Pregnancy* 2018:1-7.

Akter, T, Sibbritt, D & Dawson, A. 2016. Workforce Interventions to Deliver Postnatal Care to Improve Neonatal Outcomes in Low- and Lower-Middle-Income Countries: A Narrative Synthesis. *Asia Pacific Journal of Public Health* 28 (8):659-681.

Akunga, D, Menya, D & Kabue, M. 2014. Determinants of Postnatal Care Use in Kenya. *African Population Studies* 28 (3):1447-59.

Amenu, G, Mulaw, Z, Seyoum, T & Bayu, H. 2014. Knowledge about Danger Signs of Obstetric Complications and Associated Factors among Postnatal Mothers of Mechekel District Health Centers, East Gojjam Zone, Northwest Ethiopia. *Hindawi Publishing Corporation* 2016:1-7.

Amole, TG, Tukur, MJ, Farouk, SL & Ashimi, AO. 2019. Disrespect and abuse during facility based childbirth: The experience of mothers in Kano, Northern Nigeria. *Tropical Journal of Obstetrics and Gynaecology* 36:21-7.

Anfara, VA & Mertz, NT. 2015. *Theoretical Frameworks in Qualitative Research*. Thousand Oaks, California: SAGE Publications.

Anmut, W, Fekecha, B & Demeke, T. 2017. Mother's knowledge and practice about Neonatal Danger Signs and Associated Factors in Wolkite Town, Gurage Zone, SNNPR, Ethiopia, 2017. *Journal of Biomedical Sciences* 6(5):1-7.

Asresie, MB, Abitew, DB, Bekele, HW & Tesfaye, TD. 2019. Effect of Attending Pregnant Mothers Conference on Birth Preparedness and Complication Readiness Practice among Recently Delivered Women in Rural Libo Kemkem District, North West, Ethiopia: A Community-Based Comparative Cross-Sectional Study*. Advances in Public Health* 2019:1-9.

Babbie, ER. 2017. *The Basics of Social Research*. Boston, USA: Cengage Learning.

Bayissa, ZB, Gelaw, BK, Geletaw, A , Abdella, A , Chinasho, B , Alemayehu, A , Yosef, A & Tadele, K. 2015. Knowledge and Practice of Mothers towards Exclusive Breastfeeding and Its Associated Factors in Ambo Woreda West Shoa Zone Oromia Region, Ethiopia. *European Journal of Pharmaceutical and Medical Research* 5 (1):1-13.

Bayu, H, Adefris, M, Amano, A & Abuhay, M. 2015. Pregnant women's preference and factors associated with institutional delivery service utilisation in Debra Markos Town, North West Ethiopia: a community based follow up study. *BMC Pregnancy and Childbirth* 15 (15):1-9.

Bazeley, P. 2013. *Qualitative data analysis: Practical Strategies*. London: SAGE.

Bennett, S, Singh, S, Ozawa, s, Tran, N & Kang, J. 2011. Sustainability of donor programs: evaluating and informing the transition of a large HIV prevention program in India to local ownership. *Global Health Action* 4(10):1-9.

Birhanu, Z, Godesso, A , Jira, C & Morankar, S. 2011. Assessment of production and distribution of printed information education communication (IEC) materials in Ethiopia and utilisation in the case of jimma zone, Oromiya national regional state: a cross sectional study. *Ethiop J Health Sci* 21:77-83.

Bloomberg, LD, Volpe, M. 2018. *Completing Your Qualitative Dissertation. A road map from the beginning to end*. California: SAGE Publications Ltd.

Boucar,M, Hill,K, Coly,A, Djibrina,S, Saley,Z, Sangare,K, Kamgang,E, Hiltebeitel,S. 2014. Improving postpartum care for mothers and newborns in Niger and Mali: a case study of an integrated maternal and newborn improvement programme. An *International Journal of Obstetrics and Gynaecology* 121(4).

Bupe, B, Mulenga, C & James, N. 2016. *Factors Associated with Postnatal Care for Newborns in Zambia: Analysis of the 2013-14 Demographic and Health Survey*. ICF International Rockville, Maryland, USA: United States Agency for International Development.

Byrom, S, Edwards, G & Bick, D. 2010. *Essential Midwifery Practice: Postnatal Care*. First Edition. United Kingdom and USA: Blackwell Publishing Ltd.

Bwalya, BB, Mulenga, MC & Mulenga, JN. 2017. Factors associated with postnatal care for newborns in Zambia: analysis of the 2013-14 Zambia demographic and health survey. *BMC Pregnancy and Childbirth* 17 (418):1-13.

Callaghan-Koru, JA , Seifu, A , Tholandi, M , Graft-Johnson4, JD, Daniel, E, Rawlins, B , Worku, W & Baqui, AH. 2013. Newborn care practices at home and in health facilities in 4 regions of Ethiopia. BMC Paediatrics 13 (198):1-11

Central Statistical Agency of Ethiopia & ICF Internatinal. 2016. *Ethiopia Demographic and Health Survey 2016*.Addis Ababa and Maryland: Central Statistical Agency of Ethiopia and ICF International.

Charles, RB, Frank, W, Barbara, M, William, NP, Douglas, W & Roger, P. 2010. *Obstetrics and Gynaecology*. Baltimore and Philadelphia: Lippincott.

Chimtembo, LK, Maluwa, A, Chimwaza, A, Chirwa, E & Pindani, M. 2013. Assessment of quality of postnatal care services offered to mothers in Dedza district, Malawi. *Open Journal of Nursing* 3:343-350.

Christiana, R, Cynthia, L, Peter, H & Michael, J. 2010. Why don't some women attend antenatal and postnatal care services?:a qualitative study of community members' perspectives in Garut, Sukabumi and Ciamis districts of West Java Province, Indonesia. *BMC Pregnancy and Childbirth* 10 (61):1-12

Chukwuma, A , Mbachu, c, Cohen, j, Bossert, T & McConnell, M. 2017 ."Once the delivery is done, they have finished": a qualitative study of perspectives on postnatal care referrals by traditional birth attendants in Ebonyi state, Nigeria. *BMC Pregnancy and Childbirth* 17 (429):1-10

Clark, VLP & Creswell, JW. 2015. *Understanding Research: A Consumer's Guide*. 2nd Edition. New Jersey: Pearson Education, Inc.

Colbourn, T, Nambiar, B, Bondo, A, Makwenda, C, Tsetekani, E, MakondaM, A, Msukwa, M, Barker, P, Kotagal, U, Williams, C, Davies, R, Webb, D, Flatman, D, Lewycka, S, Rosato, M, Kachale, F, Mwansamb, C & Costello, A. 2013. Effects of quality improvement in health facilities and community mobilization through women's groups on maternal, neonatal and perinatal mortality in three districts of Malawi: MaiKhanda, a cluster randomized controlled effectiveness trial. *International Health* 5:180-195.

Corbin, J & Strauss, A. 2015. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. 3rd Edition. California: SAGE Publications, Inc.

Creswell, JW & Creswell, JD. 2018. Research Design: *Qualitative, Quantitative and Mixed Methods Approaches*. 5th Edition. London: SAGE Publications Inc.

Damtew, ZA, Karim, AM, Chekagn, CT, Zemichael, NF ,Yihun, B, Willey, BA & Betemariam, W. 2018. Correlates of the Women's Development Army strategy implementation strength with household reproductive, maternal, newborn and child healthcare practices: a cross-sectional study in four regions of Ethiopia. *BMC Pregnancy and Childbirth* 18 (Suppl 1):373:5-17

Daniel,J. 2012. *Sampling Essentials: Practical Guidelines for Making Sampling Choices.* Los Angeles: SAGE Publications, Inc.

Darega, B, Dida, N, Tafese, F & Ololo, S. 2016. Institutional delivery and postnatal care services utilisations in Abuna Gindeberet District, West Shewa, Oromiya Region, Central Ethiopia: A Community-based cross sectional study. *BMC Pregnancy and Childbirth* 16 (149):1-7

Del Poz, MR, Kinfu, Y, Drager, S & Kunjumen, T. 2007. *Counting health workers: definition, date, methods and global result.* Geneva: WHO.

Denise, F.P & Cheryl, TB. 2010. *Essentials of Nursing Research*. China: Lippincott Williams and Wilkins.

Dennis, CL, Fung, K, Grigoriadis, S, Robinson, GE & Romans, S. 2007. Traditional postpartum practices and rituals: a qualitative systematic review. *Women's Health* 3 (4):487-502.

Desta, FA, Shifa, GT , Dagoye, DW , Carr, C, Roosmalen, JV, Stekelenburg, J, Nedi, AB , Kols, Aand & Kim, YM. 2017. Identifying gaps in the practices of rural health extension workers in Ethiopia: a task analysis study. *BMC Health Services Research* 17 (839):1-12

Dhivyadeepa, E. 2015. *Sampling Techniques in Educational Research*. North Carolina: Laxmi Book Publication, Solapur.

Diane, M, Margaret, A & Anna, W. 2011. *Myles Textbook for Midwives*. London: Churchill Livingstone.

Dibari, JN, Yu, SM, Chao, SM & Lu, MC. 2014. Use of Postpartum Care: Predictors and Barriers. *Journal of Pregnancy* 2014:1-8.

Do, M & Hotchkiss, D. 2013. Relationships between antenatal and postnatal care and post-partum modern contraceptive use: evidence from population surveys in Kenya and Zambia. *BMC Health Services Research* 13 (6):1-14

Duysburgh, E, Kerstens, B, Kouanda, S, Kaboré, CP, Yugbare, DB, Gichangi, P, Masache, G, Crahay, B, Sitefane, GG, Osman, NB, Foia, S, Barros, H, Lopes, SC, Mann, S, Nambiar, B, Colbourn, T & Temmerman, M. 2015. Opportunities to improve postpartum care for mothers and infants: design of context-specific packages of postpartum interventions in rural districts in four sub-Saharan African countries. *BMC Pregnancy and Childbirth* 15 (131):1-11

Edwards, KI, Itzhak, P. 2019. Estimated Date of Delivery (EDD). Stat Pearls [Internet]. Treasure Island (FL): Stat Pearls Publishing. From: https://www.ncbi.nlm.nih.gov/books/NBK536986/ (accessed 17 09 2019).

Ekhtiari, YS, Majlessi, F, Foroushani, AR & Shakibazadeh, E. 2014. Effect of a Self-care Educational Program Based on the Health Belief Model on Reducing Low Birth Weight Among Pregnant Iranian Women. *International journal of preventive medicine* 5 (1):5

Emanuel, EJ, Grady, C, Crouch, RA, Lie, RK, Miller, FG & Wendler, D. 2011. *The Oxford Textbook of Clinical Research Ethics*. Oxford New York: Oxford University Press, Inc.

Essendi, H, Johnson, FA , Madise, N, Matthews, Z , Falkingham, J , Bahaj, AS, James, P & Blunden, L. 2015. Infrastructural challenges to better health in maternity facilities in rural Kenya: community and health worker perceptions. *Reproductive Health* 12 (103):1-11

Ethiopian Public Health Institute. 2020. The history of Ethiopian Public Health Institute. From: https://www.ephi.gov.et/index.php/2014-04-09-13-52-44/2014-04-09-13-53-29/history-of-ephi?showall=&start=1 (accessed 29 May 2020).

Federal Ministry of Health Ethiopia. 2015/16. *HSTP Woreda Based Health Sector Annual Core Plan*. Addis Ababa: Federal Ministry of Health of Ethiopia

Fikrte , T, Walelegn, W, Fekadu, M & Manaye, K. 2014. Knoweledge, and Utilisation of Postnatal Care of Mothers in Gondar Zuria District, Ethiopia: A cross sectional study. *Maternal and Child Health J* 18:2341-2351.

Flick, U. 2014. *An introduction to qualitative research*. 4th Edition. London, California, New Delhi, Singapore: SAGE.

FMOH. 2018a. *Health Extension Program Evaluation Report*. Addis Ababa: FMOH.

FMoH. 2016. *National Reproductive Health Strategy Addis Ababa*: Federal Ministry of Health.

FMoHa. 2010. *Health Sector Development Programme IV*. Addis Ababa: Federal Ministry of Health.

FMoHb.1998. Health Sector Development Programme I. Addis Ababa: Federal Ministry of Health.

FMOH. 2012. *Health Centre Requirement*. Addis Ababa: FMOH.

FMOH. 2013a. *Annual Performance Report*. Addis Ababa: FMOH.

FMOH. 2013b. *HMIS Information Use Guide.* Addis Ababa: FMOH.

FMoH. 2015a. *National Strategy for Newborn and Child Survival in Ethiopia*. Addis Ababa: Federal Ministry of Health.

FMOH. 2015b. *Health Sector Transformation Plan.* Addis Ababa: FMOH.

FMoH. 2015c. *National Strategy for Newborn and Child Survival in Ethiopia.* Addis Ababa: Federal Ministry of Health.

FMOH. 2018b. *Biomedical Education Training on MCH Medical Equipment*. Addis Ababa: FMOH.

Gabrysch, S, Lema, C, Bedriñana, E, Bautista, MA, Malca, R, Campbell, OR & Miranda, JJ. 2009. Cultural adaptation of birthing services in rural Ayacucho, Peru. *Bull World Health Organ* 87 (9):724-729.

Gebre, B, Biadglign, S, Tadesse, Z, Deribe, K, Legesse, T & Omar, M. 2017. Newborn-Care Practices and Health-Seeking Behaviour in Rural Eastern Ethiopia: A Community-Based Study. *Journal of Tropical Paediatrics* 0:1-7.

Gebrehiwot, G, Medhanyie, AA, Gidey, G & Abrha, K. 2018. Postnatal care utilisation among urban women in northern Ethiopia: cross-sectional survey. *BMC Women's Health* 18 (78):1-10

Gebrekirstos, K, Abebe, M & Fantahun, A. 2013. A cross sectional study on factors associated with harmful traditional practices among children less than 5 years in Axum town, north Ethiopia, 2013*. Reproductive Health* 11 (46):1-7

Gebretsadik, A, Alemayehu, A, Teshome, M , Mekonnen, M & Haji, Y. 2018. Home-based neonatal care by Health Extension Worker in rural Sidama Zone southern Ethiopia: a cross-sectional study. *Paediatric Health, Medicine and Therapeutics* 9:147-155.

Girma, T & Nida, H. 2008. Traditional Newbon Care in Jimma Town, SouthWest Ethiopia. *Ethiop J Health Sci* 18 (3):79-86.

Glanz, K, Rimer, BK & Viswanath, K. 2015. *Health Behaviour: Theory, Research, and Practice*. San Francisco: Jossey-Bass A Wiley Brand.

Goodyear, L, Jewiss, J, Usinger, J & Barela, E. 2014. *Qualitative Inquiry in Evaluation*. San Francisco: Jossey-Bass.

Hahn, RA & Truman, BI. 2015. Education Improves Public Health and Promotes Health Equity. *Int J Health Serv* 45 (4):657-678.

Hailemariam, S, Gebeyehu, Y, Loha, E, Johansson, KA & Lindtjørn, B. 2019. Inadequate management of pneumonia among children in South Ethiopia: findings from descriptive study. BMC Health Services Research 19 (426):1-14

Hailu, M , Gebremariam, A & Alemseged, F. 2010. Knowledge about obstetric danger signs among pregnant women in Aleta Wondo district, Sidama Zone, Southern Ethiopia. *Ethiop J Health Sci* 20 (1):25-32.

Hanlon, C , Medhin, G, Alem, A, Araya, M, Abdulahi, A, Tomlinson, M, Hughes, M, Patel, V , Dewey, M & Prince, M. 2010. Sociocultural practices in Ethiopia: association with onset and persistence of postnatal common mental disorders. *The British Journal of Psychiatry* 197 (6):468-475.

Hayden, J. 2014. *Introduction to Health Behaviour Theory*. Burlington, MA: Jones and Bartlett Learning.

Hesse-Biber, SN. 2017. *The practice of qualitative research*. Los Angeles: SAGE.

Holloway, I & Wheeler, S. 2010. *Qualitative Research in Nursing and Healthcare.* 3rd Edition: Blackwell Publishing.

Hordofa, MA, Almaw, SS, Berhanu, MG & Lemiso, HB. 2015. Postnatal Care Service Utilisation and Associated Factors Among Women in Dembecha District, Northwest Ethiopia. *Science Journal of Public Health* 3 (5):686-692.

Islam, MJ, Islam, N, Christophi, C & Yoshimura, Y. 2015. Effects of a community-based intervention package on postnatal care seeking behaviour in rural Bangladesh: a

cluster-randomized controlled trial. *Proceedings in Obstetrics and Gynecology* 5 (3):1-20.

Iwelunmor, J, Blackstone, s, Veira, D , Nwaozuru, U, Airhihenbuwa, C, Munodawafa, D, Kalipeni, E, Jutal, A, Shelley, D & Ogedegebe, G. 2016. Toward the sustainability of health interventions implemented in sub-Saharan Africa: a systematic review and conceptual framework. *Implementation Science* 11 (23):1-27.

Izadirad, H, Niknami, S, Zareban, I & Hidarnia, A. 2017. Effects of Social Support and Self-Efficacy on Maternal Prenatal Cares Among the First-Time Pregnant Women, Iranshahr, Iran. *Journal of Family and Reproductive Health* 11 (2):67-73.

Jackson, R & Hailemariam, A. 2016. The Role of Health Extension Workers in Linking Pregnant Women with Health Facilities for Delivery in Rural and Pastoralist Areas of Ethiopia. *Ethiop J Health Sci* 26 (5):471-478.

Jefferies, LM, Mathewos, B, Russell, J & Bekele, A. 2014. How do health extension workers in Ethiopia allocate their time? *Human Resources for Health* 12 (61):1-12.

Jennifer, R, Susan, K & Suzane, S. 2017. *The Practice of Nursing Research*. Missouri: Elsevier.

Jibril, UN, Saleh, GN, Afolayan, JL, Morisola, R, Umar, A & Abiola, D. 2017. Impact of Health Education Intervention on Knowledge and Utilisation of Postnatal Care Services among Women in Edu Local Government of Kwara State, Nigeria. *Journal of Basic and Clinical Reproductive Sciences* 6 (1):136-141.

Jin, Y, Zhu, W, Yuan, B & Meng, Q. 2017. Impact of health workforce availability on health care seeking behaviour of patients with diabetes mellitus in China. *International Journal for Equity in Health* 16 (80):1-10

Kaba , M, Bulto, T, Tafesse, Z, Lingerih, W & Ali, I. 2015. Sociocultural determinants of home delivery in Ethiopia: a qualitative study. *International Journal of Women's Health* 2016:93-102.

Kassahun, MB , Biks, GA & Teferra, AS. 2015. Level of immunization coverage and associated factors among children aged 12-23 months in Lay Armachiho District, North Gondar Zone, Northwest Ethiopia: a community based cross sectional study. *BMC Research Notes* 8 (239):1-10

Katherine, EA, Semrau, KEA, Hirschhor, LR, Delaney, MM , Singh, VP, Saurastri, R , Sharma, N , Tuller, DE , Firestone, R , Lipsitz, S , Dhingra? Kumar, N , Kodkany, BS, Vishwajeet, K & Gawande, AA. 2017. Outcomes of a Coaching-Based WHO Safe Childbirth Checklist Program in India. *The new England Journal of Medicine* 377 (24):2313-2324.

Khammany, P, Yoshida, Y, Sarker, MA, Touy, C, Reyer, J & Hamajima, N. 2015. Delivery care satisfaction at government hospitals in Xiengkhuang province under the maternal and child health strategy in lao pdr. *Nagoya J. Med* 77: 69-79.

Khan, K, Wojdyla, D, Say, L, Gulmezoglu, A & Paul, F. 2006. WHO analysis of cause of maternal death: a systemic review. *The Lancet* 367 (9516):1066-1074.

Kifle, MM, Ghirmai, FA , Berhe, SA, Tesfay, WS , Weldegebriel, YT & Gebrehiwet, ZT. 2017. Predictors of Women's Satisfaction with Hospital-Based Intrapartum Care in Asmara Public Hospitals, Eritrea. *Obstetrics and Gynecology International* 2017:1-7.

Klunder, ZS & Lipowski, M. 2015. The role of self-efficacy in undertaking health-seeking behaviours by physical education teachers. *Baltic Journal of Health and Physical Activity* 7 (2):45-57.

Koh, ET & Owen, WL. 2012. *Inrtroduction to nutrition and health research* New York: Springer Science Business Media, LLC.

Kumar,R. 2014. *Research Methodology a step by step guide for beginners*. Los Angeles: SAGE Publications Ltd.

Larsen, A , Cheyip, M, Aynalem, G , Dinh, T, Jackson, D, Ngandu, N , Chirinda, W, Mogashoa, M , Kindra, G, Lombard, C & Goga, A. 2017. Uptake and predictors of early postnatal follow-up care amongst mother-baby pairs in South Africa: Results from three population-based surveys,2010-2013. *Journal of Global Health* 7 (2):1-14.

Lawn, JE, Kinney, M & Blencowe, H. 2014. Every Newborn: An Executive Summary for The Lancet's Series. *The Lancet* 2014:1-8

Leavy, P S. 2014. *The Oxford Handbook of Qualitative Research.* Oxford: Oxford University Press.

Lerberg, PM, Sundby, J, Jammeh, A & Fretheim, A. 2014. Barriers to skilled birth attendance: A survey among mothers in rural Gambia. *African Journal of Reproductive Health* 18 (1):35-43.

Lewycka, S, Mwansambo, C, Rosato, M, Kazembe, P, Phiri, T, Mganga, A, Chapota, H, Malamba, F, Kainja, E, Newell, ML & Greco, G. 2013. Effect of women's groups and volunteer peer counselling on rates of mortality, morbidity, and health behaviours in mothers and children in rural Malawi (MaiMwana): a factorial, cluster randomised controlled trial. *Lancet* 381 (9879):1-25.

Li, XF, Fortney, JA, Kotelchuck, M & Glover, LH. 1996. The postpartum period: the key to maternal mortality. *International Journal of Gynecology & Obstetrics* 54:1-10.

Limenih, MA, Endale, ZM & Dachew, BA. 2016. Postnatal Care Service Utilisation and Associated Factors among Women Who Gave Birth in the Last 12 Months prior to the Study in Debre Markos Town, Northwestern Ethiopia: A Community-Based Cross-Sectional Study. *International Journal of Reproductive Medicine* 2016:1-7

Lyons, P & Doueck, HJ. 2010. *The Dissertation from beginning to end.* New York: Oxford University Press.

Maes, K , Closser, S , Tesfaye, Y, Gilbert, Y & Abesha, R. 2018. Volunteers in Ethiopia's women's development army are more deprived and distressed than their neighbours: cross-sectional survey data from rural Ethiopia. *BMC Public Health* 18:258:1-11.

Malhotra, S, Zodpey, SP, Vidyasagaran, AL, Sharma, K, Raj, SS, Neogi, SB, Pathak, G & Saraf, A. 2014. Assessment of Essential Newborn Care Services in Secondary-level Facilities from Two Districts of India. *J Health Popul Nutr* 32 (1):130-141.

Mary, JC. 2008. *Community Health Nursing*. 5th Edition. New Jersey: Pearson Education.

Mary, V, Kate, J, Robert, E, Barney, C, Francis, N, Hossen, C, Paul Michael, N & Joy, E. 2010. Sub-Saharan Africa's Mothers, Newborns, and Children: Where and Why Do They Die? *PLoS Medicine* 7 (6):1-9.

Maseresha, N, Woldemichael, K & Dube, L. 2016. Knowledge of obstetric danger signs and associated factors among pregnant women in Erer district, Somali region, Ethiopia. *BMC Women's Health* 16 (30):1-8.

Massavon , W, Wilunda, C , Nannini, M, Majwala, RK , Agaro, C, DeVivo, E, Lochoro, P , Putoto, G & Criel, B. 2017. Effects of demand-side incentives in improving the utilisation of delivery services in Oyam District in northern Uganda: a quasi-experimental study. *BMC Pregnancy and Childbirth* 17(431):1-13.

Matovu, KB, Wanyenze, RK, Mawemuko, S , Okui, O, Bazeyo, W & Serwadda, D 2013. Strengthening health workforce capacity through work-based training. *International Health and Human Right* 13 (8):1-13.

Medhanyie, A, Spigt, M , Kifle, Y, Schaay, N, Sanders, D , Blanco, R, GeertJan, D & Berhane, Y. 2012. The role of health extension workers in improving utilisation of

maternal health services in rural areas in Ethiopia: a cross sectional study. *BMC Health Service Research* 12 (352):1-9

Mirkovic, KR , Lathrop, E, Hulland, EN, Jean-Louis, R , Lauture, D, D'Alexis, GD, Handzel, E & Grand-Pierre, R. 2017. Quality and uptake of antenatal and postnatal care in Haiti. *BMC Pregnancy and Childbirth* 17 (52):1-10

Mohammed, S, Tilahun, M, Kote, M, Mama, M & Tamiru, D. 2015. Validation of Health Extension Workers Job Motivation Scale in Gamo-Gofa Zone, Southern Ethiopia: A Cross-Sectional Study. *Hindawi Publishing Corporation* 2015:1-5

Mohan, D, Gupta, S, LeFevre, A, Bazant, E, Killewo, J & Baqui, AH. 2015. Determinants of postnatal care use at health facilities in rural Tanzania: multilevel analysis of a household survey. *Pregnancy and Childbirth* 15 (282):1-10

Moshi, FV, Ernest, A, Fabian, F & Kibusi, SM. 2018. Knowledge on birth preparedness and complication readiness among expecting couples in rural Tanzania: Differences by sex cross-sectional study. *PLoS One* 2018:1-15

Moyimane, MB , Matlala, SF & Kekana, MP. 2017. Experiences of nurses on the critical shortage of medical equipment at a rural district hospital in South Africa: a qualitative study. *Pan African Medical Journal* 28 (100):1-4

Mullany, MC. 2010. Neonatal hypothermia in low-resource settings. *Semin Perinatol* 34 (6):426-433

Muller, M, Bezuidenhout, M.C & Jooste, K. 2011. *Health Care Service Management*. 2nd Edition. Cape Town: Juta.

Mwilike, B, Nalwadda, G, Kagawa, M, Malima, H, Mselle, L & Horiuchi, S. 2018. Knowledge of danger signs during pregnancy and subsequent healthcare seeking actions among women in Urban Tanzania: a cross-sectional study. *BMC Pregnancy and Childbirth* 18 (4):1-8

Naghizadeh, S, Kazemi, AF, Ebrahimpour, M & Eghdampour, F. 2013. Assessing the factors of mother's dissatisfaction with labor and delivery care procedure in educational and non-educational hospitals in Tabriz. *European Journal of Experimental Biology* 3 (6):132-139

Neelankavil, JP. 2015. *International Business Research*. New York, London: M.E. Sharpe, Inc.

Negussie, A & Girma, G. 2017. Is the role of Health Extension Workers in the delivery of maternal and child health care services a significant attribute? The case of Dale district, southern Ethiopia. *BMC Health Services Research* 17:641:1-8

Neuman, WL. 2014. *Basics of Social Research: Qualitative and Quantitative Approach*. 2nd Edition. Boston: Pearson Education, Inc.

Nipte, D, Dhayarkar, S, Pawar,S,Venkatsubramanian,S & Mehendale,S. 2015. Determinants of early discharge of mothers from hospitals after delivery in Beed block of Beed District, Maharashtra, India 2014.*Clinica lEpidemiolog yand Global Health*3:s26-s33.

Okonofua, F, Ogu, R, Agholor, K , Okike, O, Abdus-salam, R , Gana, M, Randawa, A, Abe, E, Durodola, A & Galadanci, H. 2017. Qualitative assessment of women's satisfaction with maternal health care in referral hospitals in Nigeria. *Reproductive Health* 14 (44):1-8

Oliver, P. 2010. *The student's guide to research ethics.* Maiden head, Philadelphia: Open University Press.

Oluwaseyi, D & Latifat, I. 2016. Determinants of postnatal care non-utilisation among women in Nigeria. *BMC Res Notes* 9 (12):1-11

Ostebo, MT, Cogburn, MD, Mandani, AS. 2017. The silencing of political context in health research in Ethiopia: why it should be a concern. Health Policy and Planning 33:258-270.

Ouedraogo, M , Kurji, J, Abebe, L, Labonte, R, Morankar, S, Bedru, KH, Bulcha, G, Abera, M, Potter, BK , Roy-Gagnon, M & KulkarniI, MA. 2019. A quality assessment of Health Management Information System (HMIS) data for maternal and child health in Jimma Zone, Ethiopia. *PLoS One* 14 (3):1-12

Oxford University Press. 2010. *Oxford Advanced Learners Dictionary*. London: Oxford University Press.

Patton, MQ. 2014. *Qualitative research and evaluation methods*. 3rd Edition. California: SAGE Publications.

Pavel, MS, Chakrabarty, S & Gow, J. 2016. Cost of illness for outpatients attending public and private hospitals in Bangladesh. *International Journal for Equity in Health* 15 (167):1-11.

Petrou, S, Boulvain, M, Simon, J, Maricot, P, Borst, F, Perneger, T & Irionb, O. 2004. Home-based care after a shortened hospital stay versus hospital-based care postpartum: an economic evaluation. BJOG: *An International Journal of Obstetrics and Gynaecology* 111:800-806.

Phillippi, J & Lauderdale, J. 2018. A guide to Field Notes for Qualitative Research: Context and Conversation.Qual Health Res 28 (3):381-388

PMNCH. 2011. *Global Review of the Key Interventions Related to Reproductive, Maternal, Newborn and Child Health (PMNCH)*.Geneva, Switzerland: PMNCH.

Polit, DF & Beck, CT. 2014. *Essentials of Nursing Research Appraising Evidence for Nursing Practice*. 8th Edition. Philadelphia: Wolters Kluwer Health | Lippincott Williams & Wilkins.

Pope, C & Mays, N. 2013. *Qualitative research in health care*. 3rd edition. Malden, USA: Blackwell Publishing.

Probandari, A, Arcita, A, Kothijah, K & Pamungkasari, EP. 2017. Barriers to utilisation of postnatal care at village level in Klaten district, central Java Province, Indonesia. *BMC Health Services Research* 17 (541):1-9.

Regassa, N. 2011. Antenatal and postnatal care service utilisation in southern Ethiopia: a population-based study. *African Health Sciences* 11 (1):390-397.

Resnik,DB. 2018. *The Ethics of Research with Human Subjects*. Cham, Switzerland: Springer International Publishing AG.

Ridley, D. 2012. *A step-by-step Guide for Students*. 2nd Edition. London: SAGE.

Robert, KY. 2016. Qualitative Research from Start to Finish. 2nd Edition. New York: The Guildford Press.

Rwabufigiri, BN, Mukamurgo, J, Thomson, DR, Hedt-Gautier, BL & Semassaka, JP. 2016. Factors associated with postnatal care utilisation in Rwanda: A secondary analysis of 2010 Demographic and Health Survey data. *BMC Pregnancy and Childbirth* 16:122:1-8.

Sable, P & Solanki, M. 2017. Association of Early registration of Pregnancy with ANC visits during pregnancy and Birth weight. *Community Medicine* 6 (6):21-23

Sakeah, E, Aborigo, R, Sakeah, JK, Dalaba, M, Kanyomse, E, Azongo, D, Anaseba, D, Oladokun, S & Oduro, AR. 2018. The role of community-based health services in influencing postnatal care visits in the Builsa and the West Mamprusi districts in rural Ghana. *BMC Pregnancy and Childbirth* 18 (295):1-9

Sakuma, SID, Yasuoka, U, Phongluxa, K & Jimba, MID. 2019. Determinants of continuum of care for maternal, newborn, and child health services in rural Khammouane, Lao PDR. *PLoS One* 14 (4):1-12

Salazar, LF, Crosby, RA & DiClemente, RJ. 2015. *Research Methods in Health Promotion*. San Francisco: Jossey-Bass A Wiley Brand.

Saldana, J, Omasta, M. 2017. *Qualitative Research Analysing Life*. California: SAGE Publications, Inc.

Sawe, HR, Mfinanga, JA, Ringo, FH, Mwafongo, V, Reynolds, TA & Runyon, MS. 2015. Morbidity and Mortality following Traditional Uvulectomy among Children Presenting to the Muhimbili National Hospital Emergency Department in Dar es Salaam, Tanzania. *Emergency Medicine International* 2015:1-5.

Say, L, Chou, D, Gemmill, A, Tuncalp, O, Moller, AB, Daniels, J, Gulmexoglu, AM, Temmerman, M & Leontine, A. 2014. Global causes of maternal death: a WHO systematic analysis. *Lancet Global Health* 2: 323-33.

Semanew, Y , Etaye, M , Tizazu, A , Abebaw, D & Gebremedhin, T. 2019. Newborn care practices and its determinants among postnatal mothers in Dessie Referral Hospital, Northeast Ethiopia. *BMC Res Notes* 12 (96):1-6

Sharma, A, Prinja, S & Aggarwal, AK. 2018. Measurement of health system performance at district level: A study protocol. *Journal of Public Health Research* 6 (3):917:175-183

Sharma, S, Teijlingen, EV, Hundley, V, Angell, C & Simkhada, P. 2016. Dirty and 40 days in the wilderness: Eliciting childbirth and postnatal cultural practices and beliefs in Nepal. *BMC Pregnancy and Childbirth* 16 (147):1-12.

Sharon, M.R & Matthew, R. 2012. *Reason and Rigor: How conceptual framework guide research.* California: SAGE.

Shiferaw, S, Spigt, M, Tekie, M, Abdullah, M, Fantahun, M & Dinant, GJ. 2016. The Effects of a Locally Developed mHealth Intervention on Delivery and Postnatal Care Utilisation; A Prospective Controlled Evaluation among Health Centres in Ethiopia. *PLoS One* 11 (7):1-14.

Sines, E, Syed, U, Wall, S & Worley, H. 2007. *Postnatal Care: A Critical Opportunity to Save Mothers and Newborn*. Washington: Save the Children and Population Reference Bureau.

Singh, A. 2016. Supply-side barriers to maternal health care utilisation at health sub-centers in India. *PeerJ* 4:1-23

Sometun, OD & Libisomi, L. 2016. Determinants of postnatal care non-utilisation among women in Nigeria. *BMC Res Notes* 9:21:1-11

Sparkes, AC & Smith, B. 2014. *Qualitative research methods in Sport, Exercise and Health from Process to Product*. London and New York: Routledge Taylor and Francis Group.

Tafesse, N, Gesessew, A & Kidane, E. 2019. Urban health extension program model housing and household visits improved the utilisation of health Services in Urban Ethiopia: a community-based cross-sectional study. *BMC Health Services Research* 19 (31):7:1-8

Tefera, TB , Erena, AN, Kuti, KA & Hussen, MA. 2015. Perinatal depression and associated factors among reproductive aged group women at Goba and Robe Town of Bale Zone, Oromia Region, South East Ethiopia. *Maternal Health, Neonatology, and Perinatology* 1 (12):1-9

Tigneh, M 2016. *Pregnant Women Conference Best Practice from Ethiopia*. Addis Ababa: Save the Children.

Titaley, CR, Dibley, MJ & Roberts, CL. 2009. Factors associated with non-utilisation of postnatal care services in Indonesia. *Journal of Epidemiology and Community Health* 63:827-831.

Titaley, CR, Hunter, CL, Heywood, P & Dibley, MJ. 2010. Why don't some women attend antenatal and postnatal care services?: A qualitative study of community

members' perspectives in Garut, Sukabumi and Ciamis districts of West Java Province, Indonesia. *BMC Pregnancy and Childbirth* 10 (61):1-12.

Tola, TN & Tadesse, AH. 2015. Cultural Malpractices During Pregnancy, Child Birth and Postnatal Period Among Women of Child Bearing Age in Limmu Genet Town, Southwest Ethiopia. *Science Journal of Public Health* 3 (5):752-756.

Torrey, EF. 1967. Health Services in Ethiopia. The Milbank Memorial Fund Quarterly 45 (3):275-285.

Trolley, EE, Ulin, PR, Mack, N, Robinson, ET & Succop, SM. 2016. *A Field Guide for Applied Research*. San Francisco: Jossey-Bass.

Tsawe, M & Susuman, AS. 2014. Determinants of access to and use of maternal health care services in the Eastern Cape, South Africa: a quantitative and qualitative investigation. *BMC Research Notes* 7 (723):1-11.

UNIICEF, WHO, WBG & UN. 2015. *Levels and Trends in Child Mortality*. New York: UNICEF.

United Nations. 2015. *Transforming our world: the 2030 agenda for sustainable development*. New York: United Nations.

USAID. 2012. *Postnatal Care Home Visits: A Review of the Current Status of Implementation in Five Countries*. Kigali: USAID and Save the Children.

Walliman, N. 2018. *Research Methods: The basics*. London: Routledge, Francis and Taylor Group.

Wang, H, Tesfaye, R, Ramana, NV & Chekagn, CT. 2016. *Ethiopia Health Extension Program. An institutionalized community approach for universal health coverage*. Washington DC: International Bank for Reconstruction and Development / The World Bank.

Wendimagegn, NF & Bezuidenhout, MC. 2018. Integrating promotive, preventive, and curative health care services at hospitals and health centers in Addis Ababa, Ethiopia. *Journal of Multidisciplinary Health Care* 12:243-255

Wengraf, T. 2001. *Qualitative Research Interviewing: Biographic Narrative and Semi-Structured Methods*. London, California and New Delhi: SAGE Publications.

WHO, UNICEF, UNFPA, World Bank Group & UNPD. 2015. *Trends in Maternal Mortality: 1990 to 2015*.Geneva: WHO.

WHO. 2010. *WHO Technical Consultation on Postpartum and Postnatal Care*. Geneva: WHO.

WHO. 2013. *WHO recommendations on postnatal care of the mother and the newborn*. Geneva: WHO.

WHO. 2014. *WHO recommendation on community mobilization through facilitated participatory learning and action cycles with women's groups for maternal and newborn health*. Geneva: WHO.

WHO. 2015a. *Safe Childbirth Checklist*. Geneva: WHO.

WHO. 2015b. *Water, sanitation and hygiene in health care facilities Status in low- and middle-income countries and way forward*. Geneva: WHO.

World Health Organization. 2017. Maternal, newborn, child and adolescent health. From: http://www.who.int/maternal_child_adolescent/topics/newborn/postnatal_care/en/ (accessed 14 October 2017).

WHO. 2018. *WHO recommendation on respectful maternity care during labour and childbirth.* Geneva: WHO.

WHO/UNICEF. 2012. *An equity-focused strategy to improve access to essential treatment services for children*. Geneva, New York: WHO/UNICEF.

Winn, LK , Lesser, A, Menya, DJ, Baumgartner, NJ, Kirui, OK , Saran, I and & O'Meara, WP. 2019. Motivation and satisfaction among community health workers administering rapid diagnostic tests for malaria in Western Kenya. *Journal of Global Health* 8(1):1-12.

Worku, AG, Yalew, AW & Afework, MF. 2013. Maternal Complications and Women's Behaviour in Seeking Care from Skilled Providers in North Gondar, Ethiopia. *PLoS One* 8 (3):1-8.

Yin, RK. 2015. *Qualitative Research from Start to Finish*. New York and London: The Guilford Press.

Yitayal, M, Berhane, Y, Worku, A & Kebede, Y. 2014. Health extension program factors, frequency of household visits and being model households, improved utilisation of basic health services in Ethiopia. *BMC Health Services Research* 14 (156):1-9.

Yitbarek, K, Abraham, G & Morankar, S. 2019. Contribution of women's development army to maternal and child health in Ethiopia: a systematic review of evidence. *BMJ Open* 9:1-8.

Zheng, X, Morrell, J & Watts, K. 2018. A quantitative longitudinal study to explore factors which influence maternal self-efficacy among Chinese primiparous women during the initial postpartum period. *Midwifery* 59:39-46.

ANNEXURES

ANNEXURE A: ETHICAL CLEARANCE FROM UNISA

UNISA university of south africa

RESEARCH ETHICS COMMITTEE: DEPARTMENT OF HEALTH STUDIES
REC-012714-039 (NHERC)

1 February 2017

HSHDC/600/2017
Mr AA Tsegaye
Student: 5854-007-5

Supervisor: Prof LM Modiba
Qualification: D Cur
Joint Supervisor: -

Dear Mr AA Tsegaye

Decision: Ethics Approval

Name: Mr AA Tsegaye

Proposal: Development of guidelines to improve the uptake and quality of Post Natal Care in Ethiopia.

Qualification: DPCHS04

Thank you for the application for research ethics approval from the Research Ethics Committee: Department of Health Studies, for the above mentioned research. Final approval is granted for the duration of the research period as indicated in your application.

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the Research Ethics Committee: Department of Health Studies on 1 February 2017.

The proposed research may now commence with the proviso that:

1) *The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*

2) *Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Research Ethics Review Committee, Department of Health Studies. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*

Open Rubric

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

3) *The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.*

4) *[Stipulate any reporting requirements if applicable].*

Note:
The reference numbers [top middle and right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the Research Ethics Committee: Department of Health Studies.

Kind regards,

Prof L Roets
CHAIRPERSON
roetsl@unisa.ac.za

Prof MM Moleki
ACADEMIC CHAIRPERSON
molekmm@unisa.ac.za

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

ANNEXURE B: LETTER OF PERMISSION REQUEST TO OROMIA REGIONAL HEALTH BUREAU

Date: 10-7-2010 E.C

To Oromia Regional Health Bureau

Addis Ababa, Ethiopia

Subject: Request for permission to conduct a research in South West Shoa Zone

I am a Doctorate student (D Lit et Phil in Health Studies) in the University of South Africa (UNISA). The proposed research will focus on assessing the uptake and quality of PNC services in South West Shoa Zone, Oromia Region with an ultimate objective of developing guidelines that will improve the uptake and quality of PNC services.

The study proposal was duly reviewed and approved by UNISA.Please find attached letter of ethical clearance from the University.

Thus, I am kindly requesting you to grant me permission to conduct this proposed research in South West Shoa Zone, Oromia Region.

With Regards,

Ademe Tsegaye Adgo (BSC, MPH), DLitt et Phil (Candidate)

Tel:+251930071429

E-mail:58540075@mylife.unisa.ac.za or Ademe.yona@gmail.com

ANNEXURE C: ETHICAL CLEARNACE FORM FROM OROMIA HEALTH BUREAU

BIIROO EEGUMSA FAYYAA OROMIYAA | **OROMIA HEALTH BUREAU** | የኦሮሚያ ጤና ጥበቃ ቢሮ

Lakk /Ref No/ቁጥር BOH/AH3GH/1-8/279

Guyyaa /Date/ቀን 18-7-2010

Wajjira E/Fayyaa Go/Shawaa Kibba Lixaa tiif

Walisoo

Dhimmi: **Xalayaa Deeggarsaa Kennuu ilaala**

Akkuma beekamu Biiroon keenya ogeeyyii, dhaabbilee akkasumas namoota qorannoo gaggeessuuf piroppoozaala dhiyeeffatan piroppoozaala isaanii madaaluun akkanumas iddoo biraatti ilaalchisanii fudhatama argatee (approved) dhiyaateef, piroppoozaala isaanii ilaaludhaan waraqaa deeggarsaa ni-kenna. Haaluma kanaan mata-duree **"Development of guidelines to improve the uptake and quality of Postnatal care in Ethiopia"** kan jedhu irratti **Godina Keessaan** keessatti **Barataa PHD fi qoaratan kan ta'aan Obbo Addamaa Tsagayee** piroppoozaalii isaanii koreen ***"Health Research Ethical Review Committee"*** Biiroo keenyaatti dhiyeeffataniiru. Haaluma kanaan Koreen "**Health Research Ethical Review Committee**" Biiroo keenyaas piroppoozaala kana ilaaluun mirkaneesse jira.

Haaluma kanaan yeroo amma kana immoo Qorannoo kana Godina keessaan keessatti hojjechuuf waan karoorfataaniif isiniis kana yaada keessa galchuudhaan deggarsa barbaachisa isaa akka gootan ibsa **Barataa PHD fi qoaratan kan ta'aan Obbo Addamaa Tsagayee** wayitii qorannoon kun qaacceffamee xumurame fiiriisaa kooppii tokko tokko **Biiroo Eegumsa Fayyaa Oromiyaa** fi iddoo qorannoon irratti adeemsifameef akka galii godhu mallattoo kiyyaan mirkaneessa.

Nagaa Wajjin

Birhaanuu Qanaatee

Qindeessaa Qorannoo fi Qo'annoo Fayyaa

Maqaa; **Addamaa Tsagayee**

Mallattoo________________

Guyyaa ;**19/7/2010**

Lakk. Bilbilaa; **+ 251930071429**

Tel: 0113-69-01-17/0113-69-01-19/0113-69-01-30 Fax 0113-71-72-88/0113-71-72-27

P. O. Box. 24341 E-mail: ohbhead@telecom.net.et ADDIS ABABA/FINFINE-ETHIOPIA

NNEXURE D: SUPPORT LETTER FROM SOUTH WEST SHOA ZONE HEALTH OFFICE TO CODUCT THE STUDY IN THE ZONE

Lakk ____

Guyyaa 18/11/2011

Waajjira Eegumsa Fayyaa Aanaa Gooroo tiif.

Gooroo

Dhimmi:- **Xalayaa Deeggarsaa Krnnuu ilaala.**

Akkuma ibsamuuf yaalame Biiroon Eegumsa Fayyaa Oromiyaa Ogeeyyii dhaabbilee akkasumas namoota qorannoo gaggessuuf piroppozaala dhiyeeffatan piroppozala isaanii madaaluun akkanumas iddoo biraatti ilaalchisanii fudhatama argatee (approved) dhiyaateef piroppoozaala isaanii ilaaluudhaan waraqaa deeggarsaa ni kenna. Haaluma kanaan mata-duree **"Development of guideline to improve the uptake and quality of postnatal care in Ethiopia"** kan jedhu irratti Godina Keenya keessatti **Barataa PHD fi qorataa kan ta'an Obbo Addamaa Tsaggaayee** piroppozaalli isaanii koree **"Health Research Ethical Review Committee"** Biiroo Keenyaaf dhiyeefatanii mirkanaa'ee jiraachuu isaa xalayaa lakk BEFO/AHBTTH/1-8/279 Guyyaa 18/7/2010 barrefameen Godina keenya irratti qorannoo isaanii akka gaggessan ta'ee xumura qorannoo isaanii qaacceffame firiisaa kooppii tokko tokko Biiroo Eegumsa Fayyaa Oromiyaa fi iddoo qorannoon irratti adeemsifameef akka galii godhu jechuun deeggarsa akka goonuuf nu beeksiisanii jiru.

Haaluma kanaan yeroo ammaa kana immoo Qorannoo kana Aanaa Keessan Keessatti hojjachuuf waan karoorfataniif isinis kana yaada keessa galchuudhaan deeggarsa barbaachisaa isaaniif akka gootan isiin beeksifna.

Nagaa Wajjin

Rattaa Fayyisa Gammadda

G.G

➢ Obbo Addamaa Tsaggayee

B/J

ANNEXURE E: CONSENT LETTER FOR PARTICIPANTS (OROMIFA)

UNKA HIRMAATTOTAA AF-GAAFFII FEDHI IRRATTI HUNDAA'EE TA'UU IBSU

Mata Duree Qorannoo: Itti fayyadamaa fi qulqullina kunuunsa da'umsa bodaarratti Qajaaelfama qopheessuu.

Qorataan: Addamaa Tsaggaayee Adigoo

Ademe Tsegaye Adgo, orgeessa ayyaa hawaasaa barnootaa Digirii Doktireetii Yunivarsitii 'Saawuth Afrikaa' tti hordofaa kan jiran yemmu ta'u qorannoo armaan olitti ibsamee ulagaa barnoota Digirii Dooktireetii 'Ltrature and Philosophy degree in Health Studies (DLitt et Phil)' barbaachisu guutuuf hojjechaa jira. Qorannoon kun aanaalee fi dhaabilee fayyaa Godina Shawaa Kibba Lixaa (SKL), Nannoo Oromiyaa keessatt adeemsifama.

Qorannoon kunis itti fayyadama tajaajila KDB gad fageenyaan ilaaluu fi ibsuuf akkasumas Godina SKL keessatti dhimmoota itti fayyadama tajaajila KDB irratti dhiibbaa gochaa jiran addaan baasuufidha. Qorataanis argannoo qorannoo kanaa foyya'insa itti fayyadam TKDB naannichaa kessatti jiruuf oolchuuf kan yyadamedha.

Biirii eegumsa fayya Oromiyaatti koreen "Ethcal revew Committee" tis qorannoo kana naannicha kessatti gaggessuun akka danda'amus mirkaneessee jira. Itti gaafatamtoonni Waajjiraalee Fayyaa Aanaa fii dhaabbilee fayyaa qorannoon kun kessatti adeemsifamus beeksifamani jiru.

Ani mallattoonkoo armaan gaditti kan argamu barbaachisummaa qorannoon kun ittifayyadama TKDB fooyeessuuf qabu bsi naafgodhamee jira. Akkasumas qorannoo kanarratti hirmachuukootiin rakkoon narra gahu akka hinjirres naa ibsamee jira. Hrmaannaankoo kun baay'ee morteessaa fi odeefannoon kiyya iccitiin qabamee qorannoo kanaaf qofa fayyaduu qaba. Dabalataanis, maqaan kiyya eeruun akka hinbarbaachisnes beekeen jira. Dhimman hinbarbaanne irratti yaada kennuu dhiisuuf mirga kanin qabu ta'uu, adeemsa qorannoo kana keessatti yeroo kamuu maree /gaaffi fi deebbii addan kutuu yoonedhe, itti fufuuf akkasumas sababakoo ibsuuf kan hindirqamne ta'us hubadheen jira.

Haata'uyyuu malee, qorannoo kanarratti hirmaachuuf kaniin walii galeef, odeefannoon ani kennu kun dhimmoota itti fayyadama tajaajila KDB irratti dhiibbaa gochaa jiran hubachuun kenninsa tajaajila kanaa fooyessuuf baay'ee kan fayyadu ta'uu yaaduudhani.

Waan ifa isnii ta'uu qabus yoojiraate, garqaaraa qorataa isisn walin mar'ataa jiru gaafachuu nidandeessu. Yokiin qorataa teessoo saa itti aanuun dubbisuu nidandeessu. Addamaa Tsaggaayee; Lak. Bil: +251930071429; e-mail: 58540075@mylife.unisa.ac.za

Unkaa kana dubbisee/naadubbifamee booda fedhi kiyyaan af-gaaffii qorannoo kanarratti hirmaachuuf walii galeen jira.

Mallattoo Hirmaattuu/taa:_____ Guyyaa: 9/1/2019

Kana hirmaataa/ttuu armaan olitiif ibseera akkasumas af-gaafii fedhirratti hundaa'e ta'uu hubannaa akka argatan godheera.

Mallattoo Qorataa/Gargaaraa qorataa:_____ Date: 9/1/2019

ANNEXURE F: CONSENT LETTER FOR PARTICIPANTS (ENGLISH)

Study Title: Development of guidelines to improve the uptake and quality of Post Natal Care in Ethiopia
Researcher: Ademe Tsegaye Adgo

Ademe Tsegaye Adgo, a public health professional currently pursuing a Doctoral degree from the University of South Africa conducting a study as titled above in the fulfilment of the requirements for the degree of Doctor of Literature and Philosophy degree in Health Studies (DLitt et Phil). This study will be conducted in selected districts (woredas) and health facilities of South West Shoa Zone, Oromia Region.

The purpose of this study is to explore and describe the PNC service utilisation and also identify what factors are influencing PNC service utilisation in South West Shoa Zone. The researcher intends to use the findings from this research to improve PNC service utilisation in the region.

The Oromia regional health bureau ethical review committee has approved that the study can be conducted in the Region. Heads of the study districts and health facilities have been notified to this effect.

I, the undersigned individual being oriented about the relevance of this study in improving the PNC service utilisation was well informed. I have been also informed that, there will be no risk or harm to my participation in this study. My participation in this study is crucial and all my information is to be kept confidential and will be used solely for this study. In addition, I have been well informed that my name will not be asked and unique identification is not required. I have the right not to discuss issues that I do not want to. If I want to withdraw from the study any time along the interview process, I will not be obliged to continue or give reasons for doing so.

However, my agreement to participate in this study is with the assumption that, the information that I provide during the discussion will help greatly to understand the factors influencing PNC utilisation that might help in improving the service provision.

In case you need any clarification, you can ask the research assistants discussing with you. Or you can contact the researcher with the following address. Ademe Tsegaye; Tel: +251930071429; e-mail: 58540075@mylife.unisa.ac.za

I have read this form and voluntarily consent to participate in this study.

Participant's Signature:_____ Date: _____

I have explained this to the above participant and have sought his/her understanding for informed consent.
Researcher/ research assistant's Signature:_____ Date:_____

ANNEXURE G: CONSENT LETTER FOR PARTICIPANTS (AMHARIC)

የፈቃደኝነት መግለጫ ፎርም

መግቢያ

ጤናይስጥልኝ፡፡----------እባላለሁ፡፡እኔየዚህጥናትቡድንአባልስሆንይህጥናት ዶክተርስ ዊዝ አፍሪካ ኩአም በሚባል ግብረሰናይ ድርጅት ይካሄዳል፡፡በዚህጥናትውስጥለሚያደርጉትተሣተፎበቅድሚያበጣምአመሰግናለሁ፡ ፡ስለጥናቱአላማከዚህበታችእንደሚከተለውእገልፅሎታለሁ፡፡

የጥናቱአላማ

የዚህጥናት ዓላማ በዚህ አካባቢ የእናቶችና የህፃናት የጤና አገልግሎት አሰጣጥ ምን እንደሚመስል ማወቅ ነው ከዚህ በመነሳት ወደፊት አገልግሎቱን ለመሻሻል እና የአካባቢውን ህብረተሰብ የበለጠ ተጠቃሚ ማድረግ ነው፡፡

በጥናቱመሳተፍንበተመለከተ

ይህቃለመጠይቅበግምት60 ደቂቃዎችያህልይወስዳልበዚህጥናትውስጥለመሳተፍየእርሶፈቃደኝነትአስፈላጊሲሆንያለመሳተፍ ሙሉመብትአለዎት፡፡ለመሳተፍ ፍቃደኛ ባይሆኑም በእርሶ ላይ ምንም የሚደርስ ነገር የለም፡ ፍቃደኛ ሆነው ቃለ መጠይቅ ከተጀመረ በኋላም ቢሆን ለሚጠየቀው ጥያቄ መልስ ያለመስጠት ወይም ቃለመጠይቁን በፈለጉ ጊዜ ማስቆም ይችላሉ፡፡ የምናደርገው ቃለ መጠይቅ ሚስጥራዊነቱ የተጠበቀ ሲሆን የዚህ ጥናት አጥኚዎች እርሶ የሚሰጡት መረጃ ስለ እርሶ የግል ማንነትአንዳችየሚገልፅነገርእንዳይኖረውአስፈላጊውንጥንቃቄሁሉያደርጋሉ፡፡

የሰጡትመረጃሚስጥራዊነቱየተጠበቀሆኖእንዲቀርለዚህጥናትበተዘጋጀኮምፒተርተቆልፎየሚቀመጥሲሆንከጥናቱአጥኚዎችበስ ተቀርማንምሊያየውአይችልም፡፡የጥናቱየመጨረሻውጤትለጤናባለሙያዎች፤

ለፖሊሲአውጪዎችእንዲሁምበተለያዩኮነፈረንሶችበማቅረብበጤናድርጅት/የድህረ ወሊድ አገልግሎትንለማሻሻል ጥረትይደረጋል፡፡

ይህጥናትበሰውላይምንምጉዳትእንደማያደርስከኦሮሚያክልልጤናቢሮምርምርናጥናትክፍልማረጋገጫተሰጥቶታል፡፡

እርሶበዚህጥናትበመሳተፍዎምክንያትበእርሶላይየሚደርስአንዳችጉዳትየለም፡፡

በእርግጥበጥናቱበመሳተፍዎየሚያገኙትየገንዘብምሆነሌላጥቅምየለም፡፡

ነገርግንየእርሶበዚህጥናትመሳተፍናለቃለመጠይቁየሚሰጡትመልስትልቅግምትየሚሰጠውናለጥናቱእጅግጠቃሚሲሆንየክልሉ ጤናቢሮለዚህአከባቢህብረተሰብየሚሰጠውንየጤናአገልግሎትለማሻሻልለሚያደርጉትጥረትመልካምግብዓትይሆናል፡፡

ጥያቄአለዎትት? አዎ--------የለኝም----------

ለመረጃሰብሳቢውማስታወሻ፡ጥያቄካለጥያቄውንከዚህበታችአስፍር፡፡

ተጨማሪጥያቄካለየጥናቱንአጥኝ አቶ አደመ ፀጋዬን በስልክቁጥር 0930071429 ደውለውመጠየቅይችላሉ፡፡

በጥናቱለመሳተፍፈቃደኛነዎት? አዎ--------አይደለሁም----------

(መረጃሰብሳቢ፡ፈቃደኛካልሆኑበማመስገንተሰናበት፡፡)

ስለጥናቱዓላማጉዳትናጥቅምእንዲሁምየሰጠሁትመረጃበሚስጥርስለመጠበቁበደንብተገልፆልኝቃለመጠይቁንበፈቃዴ ስለመስጠቴበፊርማዬአረጋግጣለሁ፡፡

ፊርማ፡---------- ቀን፤ ----------

እኔምየጥናቱመረጃሰብሳቢስለጥናቱዓላማጉዳትናጥቅምእንዲሁምተሳታፊውየሚሰጡትመረጃበሚስጥርስለመጠበቁበደንብ ገለፃበማድረግቃለመጠይቁንስለማድረጌበፊርማዬአረጋግጣለሁ፡፡

ስም፡---------- ፊርማ፡---------- ቀን፤ ----------

ጥናቱየሚደረግበትቦታ:_____

የጥናቱመለያቁጥር:_____

ቃለመጠይቁየተካሄደበትቀን:_____

ANNEXURE H: INDEPTH INTERVIEW GUIDE FOR WOMEN WHO GAVE BIRTH RECENTLY AND UTILISED PNC SERVICE

I. Participant Demographic Intake Sheet Form for In-depth Interview

Participant demographic intake sheet: This form should be filled before the interview

For mothers who gave birth in the past 6 month and utilised PNC services	
Participant code	
Age	
Religion	
Marital status	
Are you employed? (Yes/No)	
Educational level	
Gravidity	
Parity	
Where did you receive PNC service?(Hospital/HC/HP/At home	

II. In-depth interview guide for mothers who gave birth in the past 6 month and utilised PNC services

Name of District (woreda):_____

Name of Kebele: _____

Name of the interviewer: _____

Name of note taker: _____

Date of interview: _____

Start time: ____:_____ Adjourned: _____:_____

One question will be asked:

"Describe your experiences and views about utilisation of PNC services"

Interview guide

1. What is your understanding of PNC service provided in health facilities?
2. What are the care that should be given for the women and the newborn during PNC period
3. In your opinion what are the reasons for women not to utilise PNC services?
4. Explain the factors that influenced you to utilise PNC services?
5. How do you rate the quality of care you received from the health care workers?
6. If you were to give birth in your next pregnancy, would you use PNC services?
7. Explain factors that would motivate you to utilise PNC service in your next pregnancy?

Thank you for your participation!!

ANNEXURE I: INDEPTH INTERVIEW GUIDE FOR WOMEN WHO GAVE BIRTH RECENTLY AND DID NOT UTILISE PNC SERVICES

I. Participant Demographic Intake Sheet Form for In-depth Interview

Participant demographic intake sheet: This form should be filled before the interview

For mothers who gave birth in the past 6 month and did not utilise PNC services	
Participant code	
Age	
Religion	
Marital status	
Are you employed? (Yes/No)	
Educational level	
Gravidity	
Parity	
Where did you receive PNC service?(Hospital/HC/HP/At home	

III. In-depth interview guide for mothers who gave birth in the past 6 month and did not utilise PNC services

Name of District (woreda):_____

Name of Kebele: _____

Name of the interviewer: _____

Name of note taker: _____

Date of interview: _____

Start time: ____**:**_____Adjourned: _____**:**_____

One question will be asked:

"Describe your experiences and views about utilisation of PNC services"

Interview guide

1. What is your understanding of PNC service provided in health facilities?
2. What are the care that should be given for the women and the newborn during PNC period
3. In your opinion what are the reasons for women not to utilise PNC services?
4. Explain the factors that influenced you not to utilise PNC services?
5. How do you rate the quality of care you received from the health care workers when you go there for different services?
6. If you were to give birth in your next pregnancy, would you use PNC services?
7. Explain factors that would motivate you to utilise PNC service in your next pregnancy?

Thank you for your participation!!!

ANNEXURE J: INTERVIEW GUIDE FOR HEALTH CARE PROVIDERS, HEALTH EXTENSION WORKERS, HEALTH CENTER DIRECTORS, DISTRICT HEALTH OFFICE AND ZONAL HEALTH OFFICES TECHNICAL OFFICERS AND HEADS

Name of District: _____

Name of Health Facility: _____

Name of Interviewer: _____

Date of Interview: _____

I. Participant demographic intake form

Participant code	Age	Sex	Profession	Position held in the institution	# of service year

"Describe the experiences of offering postnatal care service in this area"

Interview guide

1. How is the PNC service utilisation in your community?
2. What do you think about the PNC service being provided in health facilities?
3. What are the benefits of PNC services for women and newborn?
4. What are the problems in offering PNC service?
5. What intervention strategies you are currently implementing to improve PNC service utilisation?
6. What intervention strategies do you suggest to be put in place to improve utilisation of PNC service?

Thank you for your participation!!!

ANNEXURE K: SAMPLE INTERVIEW TRANSCRIPT FROM RECENTLY DILIVERED WOMEN WHO DID NOT UTILISE PNC IN GORO WOREDA

Name of district- Goro woreda Sololiya Kebele

Date: January 9, 2018

I: How old is your newborn?

R: 4 months old

I: Have you been attending ANC service?

R: Yes

I: where and for how many times?

R: I have attended three ANC visits at Gurura Health centre and I gave birth after the third visit.

I: What kind of services you got during your visit for ANC?

R: They advised me to sleep on the bed and have checked my abdomen/ pregnancy, told me that my foetus is alive and moving, they told me that I was anaemic and gave me 30 tablets to take every night and advised me to come back after a month. Then I came after a month, they checked and asked me that did you get improved? I said yes, then they have given me additional dose and told me to come back any time if in case any health problem arise before your next appointment. I continued to take it and I didn't get any problem and finally I went to the health centre when labour starts.

I: What means of transport have you used to reach the health centre?

R: My kebele is Leman Abu the labour started me at home, unfortunately I didn't take telephone number to call Ambulance and it was also not indicated on my card thus, I went

to the health centre taking ‘Bajaj’. The HC provided me the service and I gave birth but they didn’t provide me any injection. Finally, I went back to my home.
I: At What time you arrived at the HC?

R: It is 10:00 Local time in the afternoon (4:00pm) and I gave birth at 1:00 Local time (7:00pm) the same day. For how long you stayed at the HC? I stayed there that night and left at 11:00 AM.

I: Would you try to recall and tell me the services you have got right after your delivery to your time of discharge?

R: Noting special but, they brought the Newburn to me. First they took the newborn and cut the cord, then they transferred me to another room and brought the baby and advised me to breast feed the baby.

I: Did you milk out (discharged) your 1st breast milk (colostrum) or directly feed your baby?

R: No, I did nothing to it and directly feed the child.

I: Is there someone who told you to give the first breast milk?

R: No, No one told me but I gave to my baby as the health care provider brought my baby and advised me to breast feed (‘give breast’) to my baby, I said ok and started to breastfeed. Then I told her that I have abdominal cramp, she told me that it is normal / expected after delivery don’t worry, she also asked me if there is bleeding and I said yes, then she told me that it is ok and good to relieve from the cramp.

I: How many visits the health workers did to you during your stay in the Health centre after delivery (postnatal)?

R: It is one time only. After my transfer to the waiting /postnatal room and they advised me to breast feed my baby, she came and visited one time. She asked me my status, I said that the cramp is still continuing /I couldn’t get a relief from it, again she asked me if there is a blood coming out and I said yes then she told me that it is normal as the blood

is still coming out and advised me to breast feed the baby and she went. Then she came back the next morning and asked me my status and checked if I have breastfeed my baby; she advised me to be strong, make myself ready to go home and clear the stuff and sit down and she didn't do anything else to me.

I: Did they make any kind of check up to you and you baby at the time of discharging?

R: 'Eeeyish..' nothing, they simply said now you can go home.

I: What advises they provided for you and your baby before discharge?

R: Nothing except to beast feed the baby and protecting from cold.

I: Is there any advice you got related to nutrition?

R: Nothing.

I: Is there any other advice they gave you in relation to breastfeeding, when to visit again the HC / HW, what to feed the child…?

R: They told me to come back at 45th day to begin vaccination / immunisation for the baby and she also said you can take family planning / contraceptive for me if there is a need.

I: What else?

R: They also told me not to give even water and to exclusively breastfeed the child up to 6 months and then to come on the 45th day to start the vaccination for the child and also to take contraceptive if I want.

I: Did you get any information regarding bathing the baby?

R: Nothing.

I: Who accompanied you when you went to home?

R: My spouse, my mother in law, and my mother and arrived at home.

I: What care you were given at home after delivery or a home care practice for delivering mothers like you?

R: We usually given like soft drinks, If we have they make porridge for us, We arrived and they brought soft drinks, but rural mothers do not get that much care and she eats whatever they can get /able to serve and no any other special care. My mother in law prepared and served me and I took to the extent my appetite allowed me to take.

I: What else care by your neighbours may be?

R: Our neighbours whom I visited before brought me ‘Chechebsa, Pourage, milk, make bread, ‘Injera with Watt’ and serve us.

I: Have you been left alone during your postnatal period and what you can say on this?

R: I didn’t get alone after coming home and there is a big difference between a women who have somebody with her and who are alone; the one who is alone and haven’t visited delivering mothers before will stay alone and get starved; but those who have visited and served delivered mothers will get his return and proudly get served.

I: Ok what care usually given for newborn at home?

R: We properly breastfeed the baby and we bath the child.

I: When was the first time you gave bath to the baby after your delivery?

R: I went home at 11:00 AM (5:00 LT) and I did it around 7:00 pm.

I: Is there anyone who told you the time to bath a newborn?

R: No one told me.
I: So, do you think that you are late or on time?

R: I am late and I should have bathed the baby immediately but I didn't get water in the health centre. We usually get education in meetings to bath our children and keeping our hygiene. Previously I gave birth at hospital and I remember that they immediately took me to bath room and I took shower and they brought me the baby. From this experience I wanted to take bath during my recent delivery at the Health centre however, there was no water and I went home without taking bath for myself and my baby. After arrival at home People were coming to visit me and I forget to bath and delayed bathing of the baby and finally the baby took bath at 7:00 PM.

I: What are the other home care practices for the newborn including giving something orally?

R: They say bath the baby, keep the baby warm, breastfeed your baby properly now and ten, give nothing else except breast milk before six months, avoid uvulectomy, we bath and also keep the fontanel.

I: Where did you learn these all?

R: I learnt in my community, I also attended trainings and I was properly informed.

I: Have you heard that there are some mothers who were diseased after delivery?

R: Yes, I heard about it.

I: What danger signs or health problems you think leads to sever health problem or death?

R: the problem may arise on mothers who didn't get vaccine during her pregnancy or attend ANC this might be a cause to give unhealthy baby, the baby may also develop a health problem if not vaccinated after birth, so I say a pregnant women need to visit health centre during her pregnancy if not I think she may suffer from a certain health problem otherwise I do not know what kind of health problem she may exactly face.

I: Would you mention if there was any postnatal problem you encountered?
R: No, I don't have any problem.

I: What kind of danger sign you perceive as indication of health problem that endanger mothers post-delivery?
R: It is like retained placenta, mal presentation for mothers who deliver at home may also suffer as the baby may come with leg or hand first while expected to appear with head but sometimes the baby's leg or hand may appear first (mal presentation), if fluids are not fully drained and I might have missed some signs as I was on maternity at the time health education was provided for the community on this topic.

I: What danger signs of newborn you know?

R: Fever, vomiting, diarrhoea, difficulty to suckle /feed breastfeed and this is all about.

I: Ok,

I: what do you do at home when you observe these sign? Is there any care to be given at home?

R: No, in my opinion I have to take to the health centre once I observe the sign.

I: After how long post-delivery, you first visited the health centre?

R: Just at 45th day for immunisation and I didn't go in between as they have already appointed me to come for the immunisation (45th Day);

I: Did a health care worker /HEW visited you at home before the 45th day?

R: No one visited me.

I: What is your understanding about the importance of seeking a health workers assistance in postnatal period / to be seen by a HWs before the 45th day be at home or HC?
R: It is important to be checked and help to know own status and also status of the newborn.

I: If so, why you didn't visit the HC during postnatal period?

R: Because I was happy with my status and feeling healthy. And also, it is believed that traditionally women should stay at home during post-natal period.

I: Do women in your area visit HC for postnatal follow up?

R: Why for, they don't go; even not all mothers coming for the 45th day immunisation.

I: How do you rate the quality of care you received from the health care workers when you go there for different services like ANC, delivery, immunisation?

R: My idea on this is that, previously they used to advise us to use family planning service but I didn't use the service at 45th day after birth and I continued to breastfeed and I went to Health centre after a year when I first seen menus is coming, I talked to the health worker that I came here to use contraceptive and she asked me if I had menses and I said yes; however she said no laboratory service at the moment to do test and told me to go home. Then I said the other time you say where is your menses but now I can show you with cotton swab and can't you give me the injection/contraceptive? I said; then she said do not nag me please go home. I said Ok and started to think that: the other time they say you didn't come while you are on menses, again they taught us to use contraceptive to space birth, but why she treated me like this today and I went home sadly. Next time when I planned to come back to the health centre, the menses didn't appear, I stayed at home and my plan to space the birth was failed and I gave birth. They also do not feel happy while providing us the service and I also feel sad for this, they also do not properly look in to our ANC card and properly treat us; they advised us to come with our spouse/husband and it is not an easy task to bring our husband to the health centre and get tested and husbands do not want to stay long in the contrary, the health workers do not give us faster service and give appointment to stay even to the afternoon but practically they do not seem quite busy, So we always go home sadly us we always encounter this think whenever we get pregnant. It is also difficult to get card as it is difficult for a mother to keep and remember a card given to her three years back, for example one pregnant mother who is my neighbour went to a health centre twice but still she couldn't get the service because she was requested to bring her previous ANC card which was given two years back (she gave birth two years back). They may say bring the card, the card might not be available or when labour comes the family members may not bring

the card with us while we go to HC for delivery. The women I mentioned came again with her husband but went home without getting the service as she couldn't find the card, we also feel sad on this, this is what I feel.

I: Is there anything you still say on areas to be improved?

R: This is all about, but to add one they advise us to come with husband for ANC service but there are people in my area who get disappointed by this and not be able to attend as women are not able to bring/influence their husband for this service because not all husbands /men are willing to go with his spouse or hear her voice, so it is not only me but there are women who are not using the ANC service because of the difficulty to bring husbands. Thus, if these could be corrected we feel happy to meet them and get their service but the points I have mentioned make us to feel sad, this is all about my idea.

I: If you were to give birth in your next pregnancy, would you use PNC services before the 45th day from the date of delivery?

R: No for now I don't have a plan to give birth.

I: I mean in case you decide to give birth will you visit even you or your newborn do not get sick?

R: Yes, I will use the service because I want to make check-up and re assure the happiness I have got at home for being healthy. I do not want to get satisfied with my own judgement rather I want to know the real health status at health centre and get know whether I am health or having a problem.

I: Is there any support from family or any other you need for postnatal visit?
R: Yes, it is my husband who will support me, Ihimm…who else will support me other than him.

I: What kind of support he will give you?

R: He will give me whatever support needed weather I am healthy or not, but he don't carry the newborn Why not? Men don't hold rather my daughter or my mother in law may hold the newborn.

I: What kind of home care you are providing to your 3 months baby like providing something to eat?

R: There is nothing I gave, even now I have asked health workers why my baby physically don't look well feed, but they still advised me to continue to properly feed breastmilk only.

I: Did they tell you how to breastfeed?

R: Yes, she advised me to breastfeed 12 times per day but how a mother could sit and feed 12 times a day because she has no time.

I: Did they tell you how to switch the breast to the baby and how to feed from both breasts?

R: Yes, they told me to feed only one breast until it gets empty because the upper portion of the breast milk is water and the nutrient s at the bottom. At around 45 days post-delivery /the date for vaccination, my baby was cuffing, after getting the baby vaccinated, the HW advised me to take to another room and I explained to the HW that the baby is cuffing and she explained me that it is not serious and advised me to properly breastfeed my baby and also asked me if I was properly breast fed my newborn? I said no, because she sleep too much, then she told me to wake up the baby and properly feed the baby until one breast get empty, previously I do not wait until one breast get empty and I switch here and there finally I did as per the advice and have seen the baby recovered from the cuff and I was very happy and shared tis idea to others.

Thank you for your participation and for providing me this valuable information.

ANNEXURE L: SAMPLE INTERVIEW TRANSCRIPT FROM GORO WOREDA MNCH SERVICE COORDINATOR

Name of district- Goro woreda

Name of the unit: Goro Woreda health office

Date: December 27, 2018

Interview with MNCH service coordinator

I. How is the PNC service utilisation in your community?

R: We can say more or less postnatal care is being given. It is being given but there are some problems besetting it. It is hard to say it is being given to the desired extent in some places. As it is known, it is important to keep mothers for 24 hours after delivery and check their health as well as that of the baby. However, it can hardly be said all mothers stay for 24 hours before being discharged. Sometimes, because of the unwillingness of members of family, the mother may be discharged before staying 24 hours. They leave of their own accord; not because anybody forces them to go. If they have a health problem that calls for serious medical attention, we keep them at least for 24 hours. If they have no health problem and insist on going, they go. After they go home, health extension workers have to follow them up going door to door and give them the second and third rounds of postnatal care services. But it cannot be said that we are doing this one hundred percent. Health extension workers must visit households and giver service to mothers and babies. We can say more or less it is good. We can say it is not bad considering the number of mothers who have given birth. We have reviewed our performance of providing postnatal care services over the last five months. We can say the performance is good.

There is a tradition in this area. Mothers are not strong enough to come for postnatal care. Recently, we were giving four rounds of four-day long training to pregnant women. One of the lessons in the training focuses on postnatal care. We observed during the training that mothers have very low motivation for coming back to health facilities for postnatal care services. They have very low motivation to come back to health facilities for their own health and for the health of the infant. They are not accustomed to this. It is new to the community. A mother is used to being taken care of at home after child birth and not going out to for check-up of have her health and the heal baby’s health. Health extension

workers go door to door to see mothers. Otherwise, mothers do not come to health facilities of their own initiative. They come occasionally but in most cases they don't. Those who come to health facilities are very few. They are so few that it is difficult to account for them. But health extension workers go door to door for check-up. Mothers don't come to health facilities because it is against tradition.

They don't go out after child birth because they fear sunlight and evil eyes. They have little tendency of overcoming all these fears and coming to health facilities. Ancient traditional beliefs have persisted until now.

We have discussed this issue in detail in our last training for pregnant women. Most mothers have raised the issue. If they go outside the house within the first two months after child birth they carry knife or something made of metal in their hands. They think the piece of metal protects them from evil spirits. They say they go to toilet mostly at night. They believe that if they go out in daylight, sun rays or people's eyes could do them harm. Even when the baby is sick and they have to take it to health facilities, they don't go out without carrying a piece of metal. They believe the piece of metal protects the baby from evil spirits. They talk of sunlight, evil spirits, people's eyes and various other deep-rooted traditional beliefs. They believe some mothers fall ill because of these. They say they have seen people who have fallen sick. Because of these beliefs it is hard to say there are mothers who come to health facilities for postnatal care. So, once they go home, they are not likely to come back. One in many mothers may come and that too is rare.

I. What do you think about the PNC service being provided in health facilities?

R: Postnatal care provision is divided into four steps, you know. There is the first 24 hour provision, another which is provided 24 hours after she has gone home and within the following three days which is called the second visit. A third visit follows within the week. The one provided between day 1 and 7 is called third visit. And the fourth visit happens within four days or thereabouts I think but I am not sure about that.

That is how it is divided by the Ministry of Health. The common problem with us is that they are providing the first 24 hour postnatal care only. That means the services provided after a mother is delivered of a child and after the placenta has been removed. That is the service within 24 hours. A mother must stay there at least for 24 hours after being

delivered of a child because it is not known what might happen to her. Most deaths occur within the first 24 hours. According to the law, a mother has to stay 24 hours in the health facility after giving birth. But the problem with us is that we cannot keep a mother for 24 hours because we have shortage of beds and rooms. In most cases a healthcare professional watches a mother for about six hours and if she has no complications, they will discharge her. But according to the law, she has to stay for 24 hours after delivery. The postnatal care givers will check BP and bleeding, fill in some questionnaire and if the mother is okay, they send her home.

III. What are the benefits of PNC services for women and newborn?

R: It has benefits both for the mother and the child. For example, if the mother has health problems, if she has say blood pressure we can spare her unnecessary problems by checking her BP. If she bleeds, she can get medical help. In addition, she can get various counselling services including how to breastfeed, exclusive breastfeeding up to six months, supplementary foods after the sixth months and how to prepare them. Postnatal care has lots of benefits.

The community has little awareness about postnatal care. Health extension workers are not working according to their instruction. According to the law, health extension workers should have been serving door to door; however, they are not working door to door. Even if they go door to door, they have shortage of medical instruments. They carry along only BP apparatus which is not enough. There are no instruments for measuring weight and body temperature. Besides, there is serious attitude problem among healthcare professionals. Only very few of them see postnatal care as a service. Health extension workers have not convinced themselves of the importance of the service and are not providing the service adequately. They have not been able to reach out to every household.

They are expected to go every month door to door and, where there is a newborn find out and record where the mother was delivered. They should also provide services needed in such places. However, there is a great gap when it comes to doing these things.
The communities do not know about the importance of postnatal care services. They say, “There is nothing wrong with me. Why do I need postnatal care?” As a result, they are not inclined to come to health facilities. They say, “I have been delivered of a child. Now it is

time to rest." They are not aware of the health problems that might come about after child birth. They don't think they will have any problem. They should give various lessons to deal with this awareness problem. There might come some changes if they teach. In addition, if a department of postnatal care opens in every health station and professionals are assigned for it, it will help to increase awareness about the importance of postnatal care by teaching mothers when they come for their baby's vaccination on the 45th day after birth. I think the fact that postnatal care is not provided as a service on its own has undermined its importance in the mind of healthcare professionals. There is antenatal care and delivery ward. However, postnatal care has not its own ward and is not provided like the other services.

In our health station, we believe a pregnant woman needs regular check-up and we are providing the service. This service is important for other services which should come afterward and is an opportunity to get mothers acquainted them and to give them counsel. Each service is interrelated with the other. We give counsel to the expectant mother about what she ought to do during pregnancy, where she ought to be delivered, preparations before child birth, and about follow up after delivery.

I: What are the problems in offering PNC service?

R: At the moment our coverage of delivery is low. We have a hospital nearby; therefore, most mothers are going to the hospital. We are doing a lot of work to encourage women to come to this health centre for delivery. For example, we are organising conference of pregnant women every month and giving them lessons as well as counselling services. We ask them to point out gaps in our service provision. They are freely giving their opinions and suggestions. Midwives also participate in these meetings. Counselling is provided on focused antenatal care, facility delivery, and counselling services after delivery. When a mother comes for antenatal care, if she is not satisfied, she is less likely to come back for other services. Every month we discuss gaps in services with healthcare professionals and work on solving them. We specially consult on proper and respectful treatment of mothers. There are many things the government should provide. For example, we are told not to hire over three midwives in one health station. However, they are not enough. There is antenatal care, delivery service, postnatal care, there is also night off/on. So, we need more professionals. Besides, when instruments are broken, there is nobody to fix them. For example, our BP instrument is broken. We have appealed

to the government about it. Biomedical engineers from the zone have looked at it and have said it was beyond their skills. Nobody cares about them.
The conference of pregnant women at health institution is organised at community level. But it is not consistent. It is not organised and strengthened in such a way that mothers can register and be followed up. If continuous conferences are organised, problems can be dealt with in the process of time.

The government's attention to postnatal care should increase. Coverage of postnatal care is still very small. More human power must come into postnatal care and it should be given as a service on its own. It should get as much attention as delivery had once. Information should be provided on the media about the importance of postnatal care and the disadvantages of not getting postnatal care services. A lot of education has been provided on HIV and other health services but postnatal care never got so much coverage. This has a lot of contribution in increasing the community's awareness. It is important also to refresh professionals once or twice a year. Kebele extension works should be strengthened. They should give the door to door services if possible or if not possible they should refer them to health facilities to make sure they get the services. The chain of services from antenatal care to postnatal care should be strengthened.

I: What intervention strategies you are currently implementing to improve PNC service utilisation?

R: What we are doing in our catchment area is the conference of pregnant women. It means we hold conferences turn by turn in each of the five kebeles. They are given appointment and with the assigned midwife they hold the conference. The health extension worker also is present at the conference. We go there by motorbike. We teach them as much as we can. We teach them about ANC, PNC, SBA, and EPI. In one conference we teach them a lot of things. They also have the PLA meetings and during the meetings they raise lots of issues and discuss them. This meeting helps them to identify their problems, list them and seek solutions for them together. They discuss the question: What is the problem of mothers? During mothers' conference, problems are brought to attention and we discuss them. Aside from the conferences and the PLA meetings, there is no campaign.

According to the regulation, we have to go to health post once a week. However, due to shortage of manpower, we cannot say we go there once a week. We go once a month. And when they go, they take a checklist. We have one motorbike which we use for traveling. Therefore, we cannot move around as we want and we cannot do supervision works as much as we want.

There is a great problem with the community. They are not coming for the second and the third visit but I say it would be good if they came and took advantage of the services.

I: What intervention strategies do you suggest to be put in place to improve utilisation of PNC service?

The conference of pregnant women at health institution is organised at community level. But it is not consistent. It is not organised and strengthened in such a way that mothers can register and be followed up. If continuous conferences are organised, problems can be dealt with in the process of time.

The government's attention to postnatal care should increase. Coverage of postnatal care is still very small. More human power must come into postnatal care and it should be given as a service on its own. It should get as much attention as delivery had once. Information should be provided on the media about the importance of postnatal care and the disadvantages of not getting postnatal care services. A lot of education has been provided on HIV and other health services but postnatal care never got so much coverage. This has a lot of contribution in increasing the community's awareness. It is important also to refresh professionals once or twice a year. Kebele extension works should be strengthened. They should give the door to door services if possible or if not possible they should refer them to health facilities to make sure they get the services. The chain of services from antenatal care to postnatal care should be strengthened.

ANNEXURE M: LANGUAGE EDITING CERTIFICATE

7542 Galangal Street

Lotus Gardens

Pretoria

0008

19 November 2019

TO WHOM IT MAY CONCERN

This certificate serves to confirm that I have edited and proofread AT Adgo's thesis entitled, "**DEVELOPMENT OF GUIDELINES TO IMPROVE THE UPTAKE AND QUALITY OF POSTNATAL CARE IN ETHIOPIA**".

I found the work easy and intriguing to read. Much of my editing basically dealt with obstructionist technical aspects of language, which could have otherwise compromised smooth reading as well as the sense of the information being conveyed. I hope that the work will be found to be of an acceptable standard. I am a member of Professional Editors' Guild.

Hereunder are my particulars:

Jack Chokwe (Mr)

Contact numbers: 072 214 5489

jackchokwe@gmail.com

Professional EDITORS Guild

ANNEXURE N: TURNITIN REPORT AND RECEIPT